



**UNDERGRADUATE  
PROGRAMS**

**1991-93**



University of Illinois  
at Urbana-Champaign

University of Illinois administrative offices at Urbana-Champaign are open Monday through Friday from 8:00 a.m. to 12:00 noon and 1:00 to 5:00 p.m., except on all-campus holidays.

An information center, available to visitors to the campus, is located in the north entrance lobby of the Illini Union. The center is open from 8:00 a.m. to 8:00 p.m. daily, including Saturdays and Sundays, when classes are in session.

Small group information sessions about the campus are available at the Campus Visitors Center in Levis Faculty Center, 919 West Illinois Street; visitors are welcome between 9:00 a.m. and 4:00 p.m., Monday through Friday, excluding campus holidays.

Information on campus activities/procedures: (217) 333-4666

The commitment of the University to the most fundamental principles of academic freedom, equality of opportunity, and human dignity requires that decisions involving students and employees be based on individual merit and be free from invidious discrimination in all its forms, whether or not specifically prohibited by law.

The policy of the University of Illinois is to comply with all federal and state nondiscrimination, equal opportunity, and affirmative action laws, orders, and regulations. The University of Illinois will not discriminate against any person because of race, color, religion, sex, national origin, ancestry, age, marital status, handicap, unfavorable discharge from the military, or status as a disabled veteran or a veteran of the Vietnam era. This nondiscrimination policy applies to admissions, employment, and access to and treatment in the University programs and activities.

Among the forms of invidious discrimination prohibited by University policy but not law is sexual orientation. Complaints of invidious discrimination based solely upon policy are to be resolved within existing University procedures.

For additional information on the equal opportunity and affirmative action policies of the University, please contact on the Urbana-Champaign campus: William A. Savage, Assistant Chancellor and Director of Affirmative Action (and Title IX and 504 Coordinator), Swanlund Administration Building, 601 East John Street, Champaign, IL 61820 (217) 333-0574.

Information contained herein is for informational purposes only and is subject to change without notice. Individual departments and units should be contacted for further information. Courses, faculty assignments, prerequisites, graduate or completion requirements, standards, tuition and fees, and programs may be changed from time to time. Courses are not necessarily offered each semester or each year. The University retains the exclusive right to judge academic proficiency and may decline to award any degree, certificate, or other evidence of successful completion of a program, curriculum, or course of instruction based thereupon. While some academic programs described herein are designed for the purposes of qualifying students for registration, certification, or licensure in a profession, successful completion of any such program in no way assures registration, certification, or licensure by an agency other than the University of Illinois.

## CENTRAL CIRCULATION BOOKSTACKS

The person charging this material is responsible for its renewal or its return to the library from which it was borrowed on or before the **Latest Date** stamped below. **You may be charged a minimum fee of \$75.00 for each lost book.**

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

TO RENEW CALL TELEPHONE CENTER, 333-8400

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

DATE

MAR 10 1997

NOV 22 1996

NOV 01 1999

FEB 10 2001

UIC-REC'D JAN 27 '01  
JAN 30 2001

MAR 19 2001

MAR 19 2001

ed by  
(1 vol)

When renewing by phone, write new due date below previous due date.

L162





CONTENTS

How to Use This Catalog ..... 1

Introduction ..... 2

Calendar ..... 5

General Information

Admission ..... 9

Precollege Programs ..... 28

Special Opportunities ..... 30

Student Services ..... 43

Student Costs ..... 48

Financial Aid ..... 60

Grading System and Other Regulations ..... 67

Graduation Requirements and Honors ..... 72

Reserve Officers’ Training Corps ..... 80

Council on Teacher Education ..... 87

Colleges and Other Academic Units

College of Agriculture ..... 95

College of Applied Life Studies ..... 129

Institute of Aviation ..... 140

College of Commerce and Business Administration ..... 143

College of Communications ..... 151

College of Education ..... 158

College of Engineering ..... 174

College of Fine and Applied Arts ..... 209

College of Liberal Arts and Sciences ..... 240

Graduate School of Library and Information Science ..... 330

School of Social Work ..... 331

College of Veterinary Medicine ..... 333

Appendices

Appendix A: Academic Deans and Directors of the Colleges, Schools and Institutes ..... 338

Appendix B: Teaching Faculty by College and Department ..... 339

Appendix C: Course Abbreviations Used in Curricular Listings ..... 357

Appendix D: University of Illinois Regulations Governing the Determination of Residence  
Status for Admission and Assessment of Student Tuition ..... 363

Index ..... 366

For Further Information ..... Inside back cover

## OFFICERS OF THE UNIVERSITY

### Board of Trustees

Jim Edgar, *Governor of Illinois*, ex officio member

#### 1987-93

Judith Ann Calder

Nina T. Shepherd

Charles P. Wolff

#### 1989-95

Kenneth R. Boyle

Donald W. Grabowski

Judith R. Reese

#### 1991-97

Gloria Jackson Bacon

Susan L. Gravenhorst

Thomas R. Lamont

In addition to the above, there are two nonvoting student members elected annually.

### University Officers

Stanley O. Ikenberry, *President of the University*

Robert W. Resek, *Vice-President for Academic Affairs*

Craig S. Bazzani, *Vice-President for Business and Finance*

Byron H. Higgins, *University Counsel*

Michele M. Thompson, *Secretary of the University*

Donald K. Coe, *University Director of Public Affairs*

David W. Olien, *Executive Assistant to the President*

### Campus Officers

Morton W. Weir, *Chancellor*

Robert M. Berdahl, *Vice-Chancellor for Academic Affairs*

Donald F. Wendel, *Vice-Chancellor for Administrative Affairs*

Judith Liebman, *Vice-Chancellor for Research*

Stanley R. Levy, *Vice-Chancellor for Student Affairs*

## How to Use This Catalog

This catalog provides general information about the University of Illinois at Urbana-Champaign and detailed information about the programs of study offered by eight undergraduate colleges, the School of Social Work, the Institute of Aviation, and the College of Veterinary Medicine. Separate catalogs are published for the Graduate College and for the College of Law at Urbana-Champaign and for the University of Illinois at Chicago. They are available from addresses on the inside back cover.

This catalog has two major parts. The first part, General Information, provides information about admission, precollege programs, special opportunities, student services, student costs, financial aid, the grading system and other regulations, graduation requirements and honors, Reserve Officers' Training Corps, and the Council on Teacher Education. The second part, Colleges and Other Academic Units, has separate sections for each of the undergraduate colleges, the Institute of Aviation, the School of Social Work, and the College of Veterinary Medicine, which detail their curricula, special academic programs, specific requirements for graduation, honors programs, and other information.

Persons who are unfamiliar with the University may find it helpful to refer first to the Introduction for a general description of the Urbana-Champaign campus.

Publications that supplement this catalog, and that are available from the Office of Admissions and Records at the address on the inside back cover, are: semester and summer session *Timetables*, which list courses offered each term, class meeting times, registration instructions, and tuition and fee charges; and the *Code on Campus Affairs and Handbook of Policies and Regulations Applying to All Students*, which contains administrative, academic, and conduct regulations. These publications are also available on campus at the Turner Student Services Building and at 177 Henry Administration Building.

Additional information about the University is available by telephoning the campus—(217) 333-1000—and asking the operator for the proper telephone number.

## Introduction

The University of Illinois at Urbana-Champaign was founded in 1867 as a state-supported, land-grant institution with a threefold mission of teaching, research, and public service. During its history, the University has earned a reputation as an institution of international stature. It is recognized for the high quality of its academic programs and the outstanding facilities and resources it makes available to students and faculty. Scholars and educators rank it among a select group of the world's great universities.

## THE CAMPUS

Located in the adjoining cities of Champaign and Urbana (combined population 100,000), approximately 130 miles south of Chicago, the University and its surrounding communities offer a cultural and recreational environment ideally suited to the work of a major research institution.

Close proximity by air, rail, bus, or car to Chicago and ready access to major cities on both coasts through daily flights to and from the University's Willard Airport make it possible to maintain the close contact with major cultural centers that is essential to the intellectual life of an international university.

The University is a residential campus of classrooms, laboratories, libraries, residence halls, and recreational and cultural facilities, with 180 major buildings on the central campus of 705 acres.

Nearly every facility on campus is accessible to the physically disabled, and the University's programs and services for the disabled have served as models worldwide.

## COLLEGES AND SCHOOLS

Eight undergraduate colleges and one school offer 150 programs of study leading to baccalaureate degrees. They are the Colleges of Agriculture, Applied Life Studies, Commerce and Business Administration, Communications, Education, Engineering, Fine and Applied Arts, and Liberal Arts and Sciences, and the School of Social Work. A certificate program is offered by the Institute of Aviation. Postbaccalaureate students study in more than 100 fields through the Graduate College and in professional programs through the Colleges of Law, Medicine, and Veterinary Medicine. National surveys consistently rank the University of Illinois at Urbana-Champaign among the top ten institutions in many fields of study, with several colleges and departments ranked among the top five.

## STUDENT BODY

There are approximately 35,000 students and 10,800 faculty and staff members in the University community. About 26,000 undergraduates (56 percent male, 44 percent female), typically from every state in the union and about 100 foreign countries, enroll each year; 94 percent of the undergraduates are Illinois residents. Minority students make up about 13 percent of the total enrollment.

Undergraduate education is strongly emphasized, and admissions are very competitive. The median ACT composite score of entering freshmen is 27, and more than 25 percent of these students ranked in the top 3 percent of their high school classes. The majority of transfer students enter the University with 4.0 grade-point averages (A = 5.0).

Approximately 100 freshmen are selected annually to join the Campus Honors Program as Chancellor's Scholars. The program fosters close, collaborative relationships between top students and distinguished faculty members through special honors sections, faculty mentors, and summer research opportunities.

Most undergraduate students receive baccalaureate degrees after four years, and many go on to advanced study in the humanities, the sciences, the social sciences, and various professional fields. Typically, 80 percent of the graduates who apply to law school are accepted; 65 percent are accepted to medical school.



## FACULTY

Scores of faculty members are members of the American Academy of Arts and Sciences, the National Academy of Sciences, and the National Academy of Engineering. Eight scientists received the National Medal of Science while on the faculty. The late Professor Emeritus John Bardeen won the Nobel Prize in physics twice — the only person ever to do so. Twenty-six faculty members have received the Presidential Young Investigators Award, established by Congress to support research by faculty members near the beginning of their academic careers.

## FACILITIES

The University Library has the third largest collection of any academic library in the nation, with more than 7 million bound volumes and over 13 million total items. There are thirty-eight departmental libraries across the campus, in addition to the main Library and the Undergraduate Library.

The University attracts more than \$170 million each year in private, state, and federal grants and contract appropriations. In recent years, a significant amount of this support has been directed toward the creation and development of major centers for advanced research and study, including more than \$100 million for the National Center for Supercomputing Applications and the Center for Supercomputing Research and Development. Together these two centers have established the University as a recognized world leader in the fields of supercomputing architecture, design, and applications. In 1985, the University was the recipient of the largest single gift ever made by an individual to a public university—\$40 million from University alumnus Arnold O. Beckman for the establishment of the Beckman Institute for Advanced Science and Technology. In 1989, the University formally opened the Beckman Institute, where interdisciplinary research is conducted on human and artificial intelligence.

A major center for the arts, the campus attracts dozens of nationally and internationally renowned artists each year to its widely acclaimed Krannert Center for the Performing Arts. The Krannert Center offers more than 320 performances each year, including those by major symphony orchestras, classical and modern ballet troupes, and individual artists such as Luciano Pavarotti, Jean-Pierre Rampal, and Isaac Stern.

The University also supports three major museums: the Krannert Art Museum, second only to Chicago's Art Institute among Illinois public museums in the size and value of its collections; the World Heritage Museum; and the Natural History Museum.

The Illini Union is a common meeting place for students, faculty, staff, and visitors to eat, play, study, and relax. It contains cafeteria and dining facilities, guest rooms, art galleries, reading and television rooms, billiards and electronic game rooms, bowling lanes, a ticket and check-cashing counter, the alumni office, and a paperback book sales center.

The University's Intramural-Physical Education Building is one of the world's largest structures for university intramural sports and recreational facilities.

The Assembly Hall holds the distinction of being the world's second largest edge-support dome. It has a permanent seating capacity of 16,000, and is used for Big Ten basketball games, performances by touring companies, concerts, conventions, convocations, and other activities.

Memorial Stadium, with a seating capacity of 76,000, is home for Fighting Illini football and track and field events.

Willard Airport serves commercial, general, and private aviation, and houses the Institute of Aviation. Located six miles southwest of campus, the airport is also a center for research, education, and military aviation. The University of Illinois holds the only Federal Aviation Administration (FAA) Airman (Pilot) Examining Agency Certificate in the country, which permits it to issue pilot certificates and ratings to its graduates on behalf of the FAA.

## COURSES AND CLASS SIZE

More than 4,000 courses are available, although some may not be offered every semester. About 80 percent of all class sections have fewer than thirty students; 46 percent have fewer than twenty.



## ACADEMIC CALENDAR

The campus has an academic calendar of two sixteen-week semesters and one eight-week summer session. A program of intensive instruction called Interession is held between the spring semester and the eight-week summer session. The fall semester begins in late August and ends in mid-December; the spring semester begins in early January and ends in early May. The summer session extends from early June to early August. Classes are taught during the hours of 8:00 a.m. to 5:00 p.m.; a few evening classes are conducted, primarily for graduate students.

## STUDENT ACTIVITIES

One of the distinct advantages of a large university is that students with varying interests can find many avenues for expression. At the Urbana-Champaign campus, there are about 750 registered student organizations.

Approximately 20 percent of the undergraduate students are actively affiliated with the Greek system, the largest fraternity and sorority system in the nation with fifty fraternities and twenty-five sororities.

All three branches of the armed services have Reserve Officers' Training Corps units on campus.

Students have the opportunity to participate in performances by eleven different choral groups, five bands plus the Marching Illini, three orchestras, five jazz bands, innumerable small ensembles, and even a Russian-style balalaika orchestra. Each year, Illinois Opera Theatre stages full-length operas, operettas, and opera scene programs. Athletics provide another avenue of enjoyment outside the classroom. The campus intramural program is the largest in the nation, with 75 percent of all students participating.

The campus is a member of the Big Ten Intercollegiate Conference, and in recent years its athletic programs have achieved national stature in a number of men's and women's sports. The Fighting Illini, in orange and blue, field eleven men's teams and eight women's teams. Men's intercollegiate sports include baseball, basketball, cross-country, fencing, football, golf, gymnastics, swimming/diving, tennis, track and field, and wrestling. The women's program includes basketball, cross-country, golf, gymnastics, swimming/diving, tennis, track and field, and volleyball.

## CAMPUS VISITORS CENTER

Prospective students and their parents are invited to visit the campus and participate in small group information sessions at the Campus Visitors Center. The center is open from 9:00 a.m. to 4:00 p.m. Monday through Friday, excluding campus holidays. Presentations are made by staff members of the Office of Admissions and Records, and arrangements can be made to meet with admission counselors and with representatives from specific academic units, the Offices of Student Financial Aid, and the Housing Division. The Campus Visitors Center is located in the Levis Faculty Center, 919 West Illinois Street, one block west of Lincoln Avenue in Urbana.

Student-conducted tours of the campus are available when classes are in session and weather permits. Reservations are recommended and may be made by calling the Campus Visitors Center, (217) 333-0824.

# Calendar

## Spring Semester 1991

Jan 7, Mon-Jan 8, Tues, 5:00 pm .....	On-campus registration
Jan 10, Thurs, 7:00 am .....	Instruction begins
Jan 21, Mon .....	Martin Luther King, Jr.'s Birthday (all-campus holiday)
Mar 23, Sat, 1:00 pm-Mar 31, Sun .....	Spring vacation
Apr 1, Mon, 7:00 am .....	Instruction resumes
May 1, Wed .....	Instruction ends
May 2, Thurs .....	Reading day
May 3, Fri-May 10, Fri .....	Final examinations
May 11, Sat-May 12, Sun .....	Commencement weekend

## Interession 1991

May 13, Mon .....	Instruction begins
May 27, Mon .....	Memorial Day (all-campus holiday)

## Eight-Week Summer Session 1991

June 6, Thurs-June 7, Fri, noon .....	Registration
June 10, Mon, 7:00 am .....	Instruction begins
July 4, Thurs .....	Independence Day (all-campus holiday)
July 8, Mon .....	Second four-week term begins
July 31, Wed .....	Instruction ends
Aug 1, Thurs .....	Reading day
Aug 2, Fri-Aug 3, Sat .....	Final examinations

## Fall Semester 1991

Aug 26, Mon-Aug 27, Tues .....	On-campus registration
Aug 29, Thurs .....	Instruction begins
Sept 2, Mon .....	Labor Day (no classes)
Nov 27, Wed, 5 pm- Dec 1, Sun .....	Thanksgiving vacation
Dec 2, Mon, 7 am .....	Instruction resumes
Dec 13, Fri .....	Instruction ends
Dec 14, Sat .....	Reading day
Dec 16, Mon-Dec 21, Sat .....	Final examinations

## Spring Semester 1992

Jan 13, Mon-Jan 14, Tues .....	On-campus registration
Jan 16, Thurs .....	Instruction begins
Jan 20, Mon .....	Martin Luther King, Jr. Holiday (no classes)
Mar 7, Sat, 1 pm-Mar 15, Sun .....	Spring vacation
Mar 16, Mon, 7 am .....	Instruction resumes
May 6, Wed .....	Instruction ends
May 7, Thurs .....	Reading day
May 8, Fri-May 15, Fri .....	Final examinations
May 17, Sun .....	Commencement

## Interession 1992

May 18, Mon .....	Instruction begins
May 25, Mon .....	Memorial Day (no classes)

## Summer Session 1992

June 11, Thurs .....	On-campus registration begins
June 15, Mon .....	Instruction begins
July 6, Mon .....	Independence Day holiday (no classes)
July 13, Mon .....	Beginning of second four-week term of instruction
Aug 6, Thurs .....	Reading day
Aug 7, Fri-Aug 8, Sat .....	Final examinations



# Admission

Undergraduate Study Opportunities ..... 9

Undergraduate Enrollment Considerations ..... 9

Admission or Readmission Denied Because of Misconduct ..... 10

Undergraduate Admission Categories ..... 10

Special Admissions ..... 11

General Requirements for Admission ..... 11

Additional Admission Requirements ..... 14

Admission of Beginning Freshmen ..... 15

Admission of Transfer Applicants ..... 18

Readmission Applicants ..... 21

Applicants for Second Bachelor’s Degrees ..... 22

Applicants for Admission as Nondegree Students ..... 22

Admission to Correspondence Courses ..... 23

Admission to Classes as a Visitor ..... 23

Admission of Foreign Students ..... 23

Admission to Summer Session ..... 25

Admission to Intersession ..... 27

Since the information in this two-year catalog is subject to change, prospective applicants should contact the Office of Admissions and Records at the address on the inside back cover for admission requirements and applications for a specific term. A complete listing of fields of study and their admission requirements is given in the booklet *Undergraduate Admissions Information*, available with application materials each September from the Office of Admissions and Records; Illinois high school students may obtain these materials from their high school counselors.

Admission counselors on campus in 177 Henry Administration Building are available for consultation on weekdays, excluding campus holidays, from 8:30 a.m. to noon and from 1:00 to 4:30 p.m. Appointments are recommended and can be made by calling (217) 333-0302. The Campus Visitors Center offers campus tours and informational sessions for prospective students and their families. (See page 4.)

## UNDERGRADUATE STUDY OPPORTUNITIES

An undergraduate applicant to the University of Illinois at Urbana-Champaign may choose a field of interest from more than 150 programs of study. These programs are referred to throughout this catalog as majors, options, or curricula, and are explained in detail in the individual college sections found elsewhere in this catalog.

In addition to the specific degree programs offered by all colleges, the College of Liberal Arts and Sciences offers preprofessional education for the fields of advertising, dentistry, journalism, law, medical dietetics, medical laboratory sciences, medical record administration, medicine, nursing, occupational therapy, pharmacy, physical therapy, social work, and veterinary medicine.

Teacher education curricula are available in the Colleges of Agriculture, Applied Life Studies, Education, Fine and Applied Arts, and Liberal Arts and Sciences.

## UNDERGRADUATE ENROLLMENT CONSIDERATIONS

The number of admissions to each undergraduate college and curriculum is carefully monitored to ensure that no more students are enrolled than the faculty and facilities can support. Each prospective student applies for admission to one of the eight undergraduate colleges, the School of Social Work, or the Institute of Aviation, and to only one curriculum within that college, school, or institute.



Because admission is highly competitive and course requirements differ by college and curriculum, each applicant's initial choice of college and curriculum is important and should be carefully considered in consultation with counselors and parents. Due to the great interest in admission to all programs, there usually is not an opportunity for a student to ask for reconsideration of admission for an alternate program after an initial admission decision has been made.

A prospective student undecided about a major field of study in a particular college may wish to consider applying for admission to one of the curricula not requiring students to declare degree program majors until the end of the sophomore year. These are the core curriculum in the College of Agriculture, the unassigned curriculum in the College of Commerce and Business Administration, the general education curriculum in the College of Education, and the general curriculum in the College of Liberal Arts and Sciences.

A beginning freshman is required to remain in the college and the prescribed freshman program to which he or she has been admitted for at least two semesters of full-time study.

A transfer student is obligated to remain in the college, and possibly the curriculum to which he or she has been admitted, for at least the first semester of enrollment. A student on campus who wishes to transfer to another college must meet the accepting college's admission requirements and compete for any available space. Due to enrollment controls, transfer to some programs is very competitive. For example, the College of Commerce and Business Administration and the College of Engineering will consider only transfer students with 60 hours of prerequisite course work.

The opportunity to enroll as a nondegree student is limited in the fall and spring semesters, and priority is given to University employees and residents of the community who wish to enroll in courses that are offered only at the University. There is no restriction on the number of nondegree students who may attend the eight-week summer session.

## **ADMISSION OR READMISSION DENIED BECAUSE OF MISCONDUCT**

The University reserves the right either to deny admission or readmission to any person because of previous misconduct that may substantially affect the interest of the University, or to admit or readmit such a person on an appropriate disciplinary status. The admission or readmission of such a person will not be approved or denied until his or her case has been heard by the appropriate disciplinary committee. This applies to persons not now enrolled in the University who might apply for admission or readmission. A favorable action of the appropriate disciplinary committee does not abrogate the right of any dean or director to deny admission or readmission on the basis of scholarship.

## **UNDERGRADUATE ADMISSION CATEGORIES**

Applicants for undergraduate admission comprise the several categories that are defined in this section. A prospective applicant may then refer to the general requirements for admission and to the succeeding section most appropriate for his or her situation.

**Beginning Freshman.** A beginning freshman applicant is either one who applies for admission while attending high school, regardless of the amount of college credit earned, or one who has graduated from high school but completed fewer than 12 semester hours or 18 quarter hours of transferable college classroom credit by the desired term of entry. A high school midyear graduate planning to attend a collegiate institution before admission to the University of Illinois at Urbana-Champaign for the fall term should apply as a beginning freshman during his or her last fall term in high school; such an applicant is admitted primarily on the basis of high school credentials and an admission test score and may complete more than 12 semester hours of transferable college classroom credit at another institution before enrollment at the Urbana-Champaign campus.

**Transfer Applicant.** A transfer applicant is one who (1) has completed a minimum of 12 semester or 18 quarter hours of transferable college classroom credit by the desired term of entry, and (2) does not meet the definition of a beginning freshman or a readmission applicant.

**Readmission Applicant.** A readmission applicant is one who has previously registered on the campus as an undergraduate degree candidate and either (1) earned credit but not a degree or (2) withdrew prior to earning credit, and who has not subsequently attended any other collegiate institution from which transfer credit is acceptable for admission.



**Second Bachelor's Degree Applicant.** A second bachelor's degree applicant is one who has earned a bachelor's degree and wishes to continue study for another bachelor's degree.

**Nondegree Applicant.** A nondegree applicant is one who wishes to take courses for credit, but either does not qualify for a degree program or does not intend to earn a degree from the Urbana-Champaign campus.

**SPECIAL ADMISSIONS**

An applicant who is not otherwise eligible, and for whom evidence clearly establishes (1) qualifications to do satisfactory work and (2) extenuating circumstances judged worthy of special consideration, may have his or her application reviewed and may be admitted with the approval of the director of admissions and records and the dean of the college concerned.

For experimental and special programs that provide academic support services, space may be reserved for applicants of different qualifications, not to exceed 10 percent of the entering freshman class of the previous fall term.

Appeals for special consideration after denial of admission are generally unsuccessful since admission spaces usually have been filled by that time.

**Table 1: Preparatory Subject Requirement Patterns in Semesters, Effective through Fall Semester 1992**

Patterns:	I		II		III		IV	
Subject	Required	Recommended	Required	Recommended	Required	Recommended	Required	Recommended
ENGLISH	6	8	6	8	6-7 <sup>4</sup>	8	6	8
ALGEBRA	4	4	2	4	4	4	4	4
GEOMETRY	2	2	2	2	2	2	2	2
TRIGONOMETRY		1		1	0-1 <sup>4,5</sup>	1	1	1
ADVANCED MATHEMATICS		1		1		3 <sup>1</sup>		3 <sup>1</sup>
ONE FOREIGN LANGUAGE <sup>2</sup>		4	4	8	4	8		4
SCIENCE <sup>2</sup>	4				4		4	
BIOLOGY		2		2		2		2
CHEMISTRY		2		2		2		2
PHYSICS						2		2
SOCIAL STUDIES <sup>2</sup>	2	4		4	2	4		4
TOTAL COLLEGE PREPARATORY <sup>3</sup>	25		25		25		25	

<sup>1</sup>Algebra completed in eighth grade will allow this recommended pattern.

<sup>2</sup>The foreign language requirement is fulfilled by four semesters of any one foreign language. Subjects included in the science field are astronomy, biology (or botany and zoology), chemistry, geology, and physics. General science will not be accepted to fulfill the science requirement but will be counted as an elective. Subjects in the social studies field include civics, commercial or economic geography, economics, history, psychology, and sociology.

<sup>3</sup>Four semesters of agriculture or home economics courses may be used by applicants to the College of Agriculture as part of the total 25 semesters required.

<sup>4</sup>A combined total of 13 semesters of English and mathematics is required, with at least 6 semesters of each; the architectural studies curriculum and the specialized curricula in biochemistry, chemical engineering, chemistry, geology, and physics require 7 semesters of mathematics, including trigonometry.

<sup>5</sup>Beginning Spring Semester 1992, the College of Commerce and Business Administration will require trigonometry.

**GENERAL REQUIREMENTS FOR ADMISSION**

The following general University policies are applicable to all undergraduate applicants at both the beginning freshman and transfer student levels.

To be eligible for consideration for admission, an applicant must meet certain requirements in terms of age, high school graduation, high school credits, college preparatory subject requirements, and competence in English.

**Age.** An applicant must be at least fifteen years of age by the time of desired enrollment.

**High School Graduation.** An applicant must be a graduate of a regionally accredited high school, a school in Illinois recognized by the state superintendent of education, or a school elsewhere with a rating equivalent to full recognition; graduates of other secondary schools and nongraduates of secondary schools may be admitted under the provisions for use of the General Educational Development Test.

**General Educational Development Test (GED).** The achievement of satisfactory scores on the General Educational Development Test is acceptable in lieu of graduation from an accredited high school. This test alone will not fulfill all of the college preparatory subject requirements.

A standard score of 35 on each of the five tests and an average standard score of 45 on all five tests are the minimum scores needed to provide the following high school credit: 9 semesters of English, 8 semesters of social studies, and 7 semesters of general science. This is a total of 24 semesters (12 units) of college preparatory subject matter and a total of 30 semesters (15 units) of high school credit. To be eligible to take these tests, applicants must be at least eighteen years of age or have been out of school for at least one year. Additional information is available upon request from the Office of Admissions and Records.

If to be used in lieu of high school graduation, General Educational Development Test scores should be sent by the testing center directly to the Office of Admissions and Records.

**High School Credits.** Applicants for admission to all curricula must present a total of at least 15 units of acceptable college preparatory schoolwork. Graduates of schools organized as three-year senior high schools, including grades ten, eleven, and twelve, must have at least 12 units in the senior high school. Credit earned prior to grade nine is acceptable if the transcript of credit, certified by the senior high school, shows the credit as high school credit from grade eight. A *unit* course of study in the secondary school is a course covering an academic year and including not less than the equivalent of 120 sixty-minute hours of classroom work. Two hours of work requiring little or no preparation outside the class are considered as the equivalent to one hour of prepared classroom work. Fractional units of the value less than one-half are not accepted. Not less than 1 unit of work is accepted in a foreign language, elementary algebra, plane geometry, physics, chemistry, or biology. The required 15 units must include the following:

1. Three units of *English*. Work offered to meet this requirement should be composed of studies in language, composition, and literature, requiring practice in expository writing in all such work. Course work should emphasize reading, writing, speaking, and listening.
2. One unit each in *algebra and plane geometry*. General mathematics, college preparatory mathematics, or other courses in mathematics may be accepted in lieu of algebra and plane geometry, or more advanced courses, in any case in which the content of the course is essentially the same as that ordinarily included in the required course, as determined by the Department of Mathematics at the University of Illinois at Urbana-Champaign. When such courses are not equivalent to the prescribed algebra and plane geometry or more advanced courses, they will be accepted as elective credit.
3. The *college preparatory subjects* prescribed in the pattern specified for the curriculum for which the application is being made. Acceptable college preparatory subjects are English and mathematics courses as described above plus courses in foreign language, the sciences, and social studies as shown in Table 1.
4. *Elective units* selected from any of the high school subjects that are accepted by an accredited school toward its diploma and that meet the standards for accrediting. Courses in such fields as agriculture, art, commerce, general science, home economics, industrial arts, and music are accepted as elective units to complete the 15 required for admission.

**College Preparatory Subject Requirements.** Admission to each college and curriculum requires that applicants complete a specific number of units in certain college preparatory high school subjects (see Table 1, page 11).

The subjects required for admission to the Urbana-Champaign campus differ depending on the college and curriculum selected by the applicant. There are four different patterns, or combinations of subjects, designated by Roman numerals I, II, III, and IV in Table 1 on page 11. Applicants must have the courses under the "Required" column for their applications to be considered. The majority of successful applicants exceed the minimum course requirements and have strong college preparatory backgrounds. The subject patterns required for admission to various colleges and curricula on the Urbana-Champaign campus (effective through Fall Semester 1992) are listed below and are given in *Undergraduate Admissions Information*, an annual publication available each September from the Office of Admissions and Records.



College	Pattern
AGRICULTURE	
AGRICULTURAL ENGINEERING AND SCIENCE	IV
ALL OTHER CURRICULA	I
APPLIED LIFE STUDIES (ALL CURRICULA)	III
AVIATION (ALL CURRICULA)	I
COMMERCE AND BUSINESS ADMINISTRATION (ALL CURRICULA)	III
EDUCATION (ALL CURRICULA)	III
ENGINEERING (ALL CURRICULA)	IV
FINE AND APPLIED ARTS	
ARCHITECTURAL STUDIES	III
LANDSCAPE ARCHITECTURE	I
URBAN AND REGIONAL PLANNING	I
ALL OTHER CURRICULA	II
LIBERAL ARTS AND SCIENCES (ALL CURRICULA)	III

Except for admission to the College of Fine and Applied Arts, the subject pattern requirements are waived for transfer applicants who will have completed 30 or more semester hours of transferable college credit by the date of enrollment at the Urbana-Champaign campus.

Under extenuating circumstances, a specific subject requirement may be waived for otherwise well qualified applicants. An applicant seeking a waiver of the subject pattern requirement should use the Background Statement section of the application to state the rationale for requesting such action.

A student who lacks a required high school subject may satisfy the requirement at either a community college or elsewhere prior to enrollment at the University. This information must be communicated on the application for admission. One semester in college is the equivalent of 2 semesters of high school course work.

New preparatory subject requirements will be required of students seeking admission beginning with Spring Semester 1993 (see Table 2, below). The four current patterns will be consolidated into a single pattern of required course work applicable for all colleges admitting freshmen. In all subject areas, this new pattern meets or exceeds the minimum entrance requirements specified by Public Act 86-0954 governing the admission of students to Illinois public colleges and universities. As is now the case, most successful applicants will exceed these requirements and have very strong college preparatory backgrounds.

**Table 2: Preparatory Subject Requirements in Years of Course Work  
Effective Spring Semester 1993**

Subject	Years of Course Work	Explanatory Notes
ENGLISH <sup>1</sup>	4	
MATHEMATICS <sup>2</sup>	3 or 3.5	3.5 years of mathematics including trigonometry are required in the following curricula: Commerce and business administration: all curricula Engineering: all curricula Fine and applied arts: architectural studies Liberal arts and sciences: specialized curricula in biochemistry, chemical engineering, chemistry, geology, and physics.
SOCIAL STUDIES <sup>3</sup>	2	
LABORATORY SCIENCE <sup>4</sup>	2	
ONE FOREIGN LANGUAGE <sup>5</sup>	2	Fine and applied arts curricula, except architectural studies, allow the substitution of two years of any combination of art, music, or foreign language.
FLEXIBLE ACADEMIC UNITS	2	Two courses from any of the five subject categories. Approved art, music, or vocational courses may be counted in the flexible academic units category.
TOTAL ACADEMIC UNITS	15 or 15.5	

<sup>1</sup>Studies in language, composition, and literature, requiring practice in expository writing in all such work. Course work should emphasize reading, writing, speaking, and listening.

<sup>2</sup>Algebra, geometry, advanced algebra, and trigonometry. Typically, such courses as career/occupational mathematics, consumer mathematics, applied business mathematics, pre-algebra, and computer courses are not acceptable.

<sup>3</sup>History and government are preferred. Additional acceptable social studies include anthropology, economics, geography, philosophy, political science, psychology, and sociology.

<sup>4</sup>Laboratory courses in biology, chemistry, or physics are preferred. Laboratory courses in astronomy and geology are also acceptable. General science will not be acceptable.

<sup>5</sup>Two years of any one foreign language fulfills the requirement.

**Competence in English.** A minimum requirement for competence in English applies to all University students. Undergraduate applicants for admission may satisfy this minimum requirement by certifying that one of the following conditions has been fulfilled in a country where English is the primary language and in a school in which English is the primary language of instruction:

- Graduation with credit for 3 units, or the equivalent, of English from a secondary school;
- or successful completion of a minimum of two academic years of full-time study at the secondary school or collegiate level immediately prior to the proposed date of enrollment in the University.

For an applicant who does not meet one of the above conditions, evidence can be provided by achieving a satisfactory score on a test of competence in English. The test(s) to be used and the minimum score(s) shall be subject to approval by the University Committee on Admissions with the advice of the University’s Technical Committee on Testing. This requirement may be waived upon agreement by the director of admissions and records and the dean of the college concerned if evidence of competence in English presented by the applicant clearly justifies such action.

ADDITIONAL ADMISSION REQUIREMENTS

A few colleges and curricula have admission requirements in addition to the regular academic standards. Instructions on how to fulfill these additional requirements are forwarded to students soon after their applications are received. *Students should be aware that additional time is required to process applications for admission to curricula with additional admission requirements. Students denied on the basis of additional admission requirements may find all admission spaces filled in alternative programs at the time of notification. Thus, such applicants should apply early and may also wish to apply to other institutions.* The following chart indicates the colleges and curricula with additional admission requirements.

Colleges and Curricula	Special Requirements
AGRICULTURE	Professional interest statement
AVIATION	Personal Interview and aptitude test
COMMUNICATIONS	Additional background information
EDUCATION	
TEACHING OF MODERATELY AND SEVERELY HANDICAPPED CHILDREN	Additional background information
FINE AND APPLIED ARTS	
DANCE	Qualifying audition
GRAPHIC DESIGN	Portfolio review (transfer students)
INDUSTRIAL DESIGN	Portfolio review (transfer students)
MUSIC	Qualifying audition
PHOTOGRAPHY	Portfolio review (transfer students)
THEATRE	Qualifying audition or interview
URBAN AND REGIONAL PLANNING	Professional interest statement
SOCIAL WORK	Additional background information

## Health Requirements

### PHYSICAL AND MENTAL HEALTH

New students may be required to present evidence of satisfactory physical and mental health to the director of health services. Each admitted applicant will receive a Student Health Report form, which he or she must use to report proof of immunity to certain vaccine-preventable diseases as defined by state law and required by University regulations, as well as any other pertinent medical data, to the director of the McKinley Health Center at Urbana-Champaign. A minor (someone under eighteen years of age at the time of registration) must submit the Student Health Report form with a parent's or guardian's written authorization for the student to receive treatment at the McKinley Health Center. A student who fails to return the completed Student Health Report form by the date shown on the form and who fails to comply by the end of the first term of enrollment is prohibited by state law from subsequent enrollment in the University. Upon the advice of a McKinley Health Center physician, admission or readmission of a student may be denied until the student is cleared by the McKinley Health Center.

Students transferring from the University of Illinois at Chicago should request that their Student Health Report forms be transferred by the health center on that campus to the McKinley Health Center.

Military personnel may have their Student Health Report forms completed by a military physician.

### TUBERCULOSIS CONTROL

New and readmitted students are encouraged to present evidence of freedom from tuberculosis at the McKinley Health Center. *All new international students are required to complete a tuberculosis screening at the McKinley Health Center before completing registration.*

Final evidence of freedom from tuberculosis is established by either a negative tuberculin skin test performed within the last twelve months by a healthcare provider in the United States, or a negative tuberculin skin test performed at the McKinley Health Center at Urbana-Champaign prior to registration.

A person who has a positive skin test is required to have a chest X-ray. A person with a known history of positive reaction to the tuberculosis skin test will not be retested, but will require a chest X-ray to show evidence of freedom from active tuberculosis. An individual who has had a chest X-ray performed within the previous twelve months will not require an additional chest X-ray if the previous chest X-ray is obtainable and meets the University's chest X-ray standards. A student with a positive skin test must schedule an appointment in the Tuberculosis Screening Clinic at McKinley Health Center to review his or her health history.

## ADMISSION OF BEGINNING FRESHMEN

Dates for filing complete applications for admission or readmission are given in the following and other application calendars. Each deadline date applies as long as space remains available in the desired curriculum. Any applicant claiming exceptional circumstances that justify special consideration should appeal in writing to the director of admissions and records for an extension of filing deadline dates. Only rarely, however, are spaces available by these late dates, and applicants are encouraged to apply during the periods indicated in the application calendars.





## Admission Test Information

Each beginning freshman applicant, regardless of rank in class or length of time out of school, is required to submit an admission test score from either the American College Testing (ACT) program or the Scholastic Aptitude Test (SAT) of the College Entrance Examination Board. An applicant will not complete the admission requirements until the test score is received by the Office of Admissions and Records in the form of an official score report sent directly from the testing agency concerned. Complete information concerning the test, the dates of test administration, and the location of testing centers may be obtained from high school counselors or by writing to the appropriate testing agency: American College Testing, Box 168, Iowa City, Iowa 52240, or College Board, 45 Columbus Avenue, New York, New York 10023-6917.

A prospective applicant is urged to complete an admission test in the spring of his or her junior year in high school.

## Background Statement

Objective academic qualifications will be the major factors considered in admission decisions. In addition, the Office of Admissions and Records also attempts to identify those applicants whose class ranks and admission test scores or transfer grade-point averages may underpredict their likelihood of success, and those whose admission would add diversity to the educational and social environment of the campus.

An applicant who believes that his or her academic credentials do not adequately reflect his or her potential may complete the Background Statement on the application form. The applicant should be aware, however, that unless he or she is close to meeting the guidelines published for the college to which application is being made, the Background Statement may have little impact on the admission decision.

A student who attends a highly selective high school for which a profile may not be on file with the Office of Admissions and Records is urged to have a counselor attach the school profile to the student's transcript and to request a review through the Background Statement.

Among the factors the Office of Admissions and Records may consider in making decisions are (1) a permanent physical disability; (2) a health problem that significantly affected, for a period of time, an otherwise exceptionally good academic record; (3) an economically disadvantaged environment; (4) an age group or a cultural or ethnic background that will add diversity to the campus; (5) completion of Advanced Placement or honors-level courses in high school; (6) significant work experiences related to the requested field of study; and (7) performance at a level that has brought state or national recognition in a specific field of endeavor.

## Application Documents

An applicant for admission as a freshman must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- A completed admission application form. Admission application forms are available from high school counselors and from the Office of Admissions and Records at the address on the inside back cover. High school students should submit applications through their high schools.
- A \$25 (\$35 for foreign students) check or money order (amount subject to change), payable to the University of Illinois, in payment of the nonrefundable application processing fee. The University is not responsible for cash sent through the mail.
- An official high school transcript sent directly to the Office of Admissions and Records from the high school showing course work completed by the applicant, the date of graduation, and the size of the graduating class and the applicant's numerical rank. (Since it is the policy of the University to accept for admission the academically best qualified of applicants competing for limited spaces, the University needs an objective measure of the applicant's academic qualification that is comparable to measures used by other high schools. Descriptive statements are generally not comparable from school to school and probably will work to the applicant's disadvantage unless accompanied by a numerical class rank. Therefore, *high school personnel are urged to provide a numerical class ranking*. Students from three-year senior high schools should request that certification of work taken in the ninth grade be included on or with the transcript. Eighth-grade work for high school credit also should be included.)



- An official admission test score report (ACT or SAT) sent directly to the Office of Admissions and Records from the testing agency.
- A transcript of any college-level course work completed by the freshman applicant sent directly from the collegiate institution attended.

## ADMISSION OF TRANSFER APPLICANTS

### Application Calendar: Transfer Applicants

Filing Period		Notification Time
Spring Transfer Applicants:		
September 25-November 1	All applicants for spring admission.	December
November 1-January 1	Applications taken on a space-available basis. Contact the Office of Admissions and Records for openings.	Approximately four weeks after filing
Fall Transfer Applicants:		
February 1-March 15	Applications for all colleges will be considered during this period.	Mid-April
March 15-August 1	Applications taken on a space-available basis. Contact the Admissions Office for openings.	Admission decisions made monthly

### Transfer Students from the University of Illinois at Chicago

Undergraduate transfer students between the University of Illinois at Chicago and the Urbana-Champaign campus may be admitted to undergraduate programs on the other campus for which spaces are available for transfers from other colleges and universities, provided that they meet the requirements of the desired programs at the other campus for admission of on-campus transfers. Generally, admission opportunities are better in all curricula if applicants have junior standing (60 semester hours or 90 quarter hours). To be ensured consideration as intercampus transfers by the Urbana-Champaign campus, students currently enrolled at the Chicago campus should apply for transfer consideration for the spring term between September 25 and November 1, and for the summer or fall term between February 1 and March 15.

Applicants to the Urbana-Champaign campus are encouraged to go to the Chicago Office of Admissions and Records, where copies of official credentials will be enclosed with their application and where current enrollment can be verified to permit waiving of the application fee.

### Transfer Applicants Previously Dropped or Placed on Probation for Disciplinary Reasons

A petition for admission of a transfer students who either is on disciplinary probation or has been dropped from another collegiate institution for disciplinary reasons must be approved by the appropriate subcommittee of the Senate Committee on Student Discipline.

### Requirements for Admission

To assist prospective applicants in assessing their opportunities for admission, transfer grade-point average guidelines are published in the *Undergraduate Admissions Information* booklet available with application materials each September from the Office of Admissions and Records. These are guidelines only, and the final standards will depend on the number and qualifications of the applicants to each program.

Admission of a transfer applicant is based on a combination of the hours and content of transferable credit and the transfer grade-point average. The minimum transfer grade-point average is 3.25 (C = 3.0); most curricula require a higher grade-point average.

If the number of qualified applicants to a college or curriculum exceeds the admission quota, those best qualified will be admitted, and preference may be given to residents of Illinois. Lower-division transfer applicants may be restricted when campus space is limited.

Additional criteria may be considered in determining the admission of those applicants near the borderline of the competitive applicant pool; these additional factors are described in the

Background Statement section on page 17. An applicant who has had a significant break in the pursuit of an education and can demonstrate an improved academic performance, or an applicant for whom relocation from the Urbana-Champaign community would present a major hardship, may wish to address such a factor in the Background Statement section of the application for admission.

Eligibility of a transfer applicant with fewer than 30 semester hours of graded transferable classroom credit is based on (1) high school percentile rank and ACT or SAT test score, and (2) grade-point average and content of transferable courses attempted.

## **Grade-Point Averages**

Grade-point averages are calculated on the basis of all transferable courses attempted for which grades are assigned and for which grade-point values can be determined. When a course is repeated, the grade-point average is computed using both grades and all hours for the course. Incomplete grades are accepted as defined by the initiating institution. Grades in other course work completed, such as technical courses similar in content and level to courses taught at the University of Illinois at Urbana-Champaign, may be used in the evaluation for admission upon request of the college to which a student seeks admission.

Since the grade-point average used to establish admission qualifications is based on all transferable course work attempted, applicants from institutions with “forgiveness” grading policies (those that may delete grades for course work failed and/or repeated) may find their opportunities limited to special admission (see page 11). If the applicants are admitted and subsequently register, transfer grade-point averages may not be recorded on their University of Illinois at Urbana-Champaign records since the grading policies of the transfer institutions and this campus are not comparable.

## **Acceptance of Credit from Other Collegiate Institutions**

Credit may be accepted for advanced standing from another accredited university or college. Accepted credit will be based on evaluation of the primary transcript of record of each institution attended. Duplicate credit will be counted in the grade-point average but excluded from hours earned. A student who has passed a course at the University of Illinois at Urbana-Champaign may not be given credit for the same course taken elsewhere.

## **Acceptance of Traditional Transfer Credit**

Admission of transfer students to the University of Illinois is based only on the transfer course work that is similar in nature, content, and level to that offered by the University of Illinois. Such courses are normally referred to as transfer or college-parallel work. Other course work completed, such as technical courses similar in content and level to courses taught at the University, will be used in evaluation for admission only upon the request of the dean of the college to which the student seeks admission.

Transfer credit, as defined, will be accepted at full value for admission purposes on transfer to the University of Illinois at Urbana-Champaign if earned at:

- Colleges and universities that offer degree programs comparable to programs offered by the University of Illinois and (1) are members of or hold Candidate for Accreditation status from the North Central Association of Colleges and Schools or another regional accrediting association, or (2) are accredited by another accrediting agency that is a member of the Council on Postsecondary Accreditation; or
- Illinois public community colleges that are neither members of nor holders of Candidate for Accreditation status from the North Central Association of Colleges and Schools, but that are approved and recognized by the Illinois Community College Board (ICCB) for a period of time not to exceed five years from the date on which the college registers its first class after achieving ICCB recognition.

Certain colleges and universities do not meet the above specifications but have been assigned a status by the University Committee on Admissions that permits credit to be accepted on a provisional basis for admission purposes on transfer to the University of Illinois at Urbana-Champaign. Transfer credit, as defined, from such colleges and universities is accepted only on a deferred basis, to be validated by satisfactory completion of additional work in residence. Validation through satisfactory work in residence may be accomplished by earning at the University of Illinois at Urbana-Champaign, or another fully accredited<sup>1</sup> college



or university, at least a 3.0 (A = 5.0) grade-point average (higher if prescribed by the curriculum the student wishes to enter) in the first 12 to 30 semester (18 to 45 quarter) hours completed after transfer.

Credit transferred from an approved<sup>1</sup> community or junior college is limited only by the provision that the student must earn at least 60 semester or 90 quarter hours required for the degree at the University or at any other approved<sup>1</sup> four-year college or university after attaining junior standing, except that the student must meet the residence requirements that apply to all students for a degree from the University of Illinois at Urbana-Champaign. When a school or college within the University requires three years of preprofessional college credit for admission, at least the last 30 semester or 45 quarter hours must be taken in an approved<sup>1</sup> four-year collegiate institution.

---

<sup>1</sup>Colleges and universities meeting one or more of the specifications as defined.

---

In all cases, the precise amount of transfer credit that is applicable toward a particular degree will be determined by the University college and department concerned.

## Acceptance of Nontraditional Transfer Credit

Acceptance of credit awarded on bases other than collegiate classroom experiences will be considered for transfer admission purposes as follows:

**Test credit for admission as transfer credit.** Students presenting test credit awarded elsewhere, or test scores for admission or transfer credit purposes, will have that credit evaluated against cutoff scores established for those examinations on the Urbana-Champaign campus. Official score reports should be submitted to the Office of Admissions and Records along with the application for admission to the University. A student presenting test credit for which (1) no Urbana-Champaign campus policy exists, or (2) campus cutoff scores indicate no credit will be awarded, may still be granted transfer credit if the student (1) is transferring at least 12 graded classroom semester hours of acceptable college-level graded classroom course work from the institution or single campus in a multicampus institution that awarded the credit by examination; and (2) has successfully completed advanced classroom course work at the institution awarding the test credit in a course that is acceptable under University of Illinois at Urbana-Champaign transfer credit policies *and* that can be considered as a sequential continuation of the material covered in the test.

After admission, students not awarded credit under this policy may attempt departmental proficiency examinations to receive credit in those areas in which they claim competence.

**Credit for military training.** The completion of six months or more of continuous active duty in the U.S. armed forces, including basic or recruit training, is accepted for advanced standing credit of 4 semester hours of basic military science on presentation of evidence along with an honorable discharge or transfer to the reserve component. Candidates for graduation who are still in military service are entitled to the same credit. Credit in military science may also be granted for other training completed in the service that is acceptable as the equivalent of Reserve Officers' Training Corps (ROTC) courses at the University of Illinois at Urbana-Champaign. Such credit may be used for admission purposes. Credit duplicating ROTC credit will not be awarded.

**Credit for education in the armed forces.** The U.S. Armed Forces Institute (USAFI) was an educational program that existed prior to May 1974. The University considers for advanced standing credit those USAFI courses of college level for which the student has passed the appropriate USAFI end-of-course examination. Marine Corps Institute courses also will be considered on the same basis. The University may consider for advance standing credit work completed in the Air Force, Army, Coast Guard, Marine Corps, and Navy specialized and technical schools. Criteria to determine acceptability include the specific degree requirements of the program of application, similarity to courses on this campus, and recommendation of the American Council on Education in the *Guide to the Evaluation of Educational Experience in the Armed Services*.

All criteria are subject to the recommendations of the college to which the student seeks admission and the department that teaches similar course work.



Credit earned in the College Training Programs of the Air Force, Army, Marine Corps, and Navy, which functioned during World War II, is accepted on the same basis as other credit from the colleges and universities where such credit was completed.

*Credit earned in academic courses sponsored by noncollegiate organizations, such as business, industry, and labor, not recognized by the April 1977 Board of Trustees policy statement.* Credit earned in such courses is not normally accepted. Such credit may be evaluated for potential advanced standing in a specific degree program after admission and registration; this credit shall be subject to validation by proficiency examination or successful completion of advanced course work. Hours of this type of credit may be reduced from that shown by the originating agency. Criteria to determine acceptability for advanced standing include the specific degree requirements of the program of enrollment, similarity to courses on this campus, and recommendations of the American Council on Education in *The National Guide to Educational Credit for Training Programs*.

All criteria are subject to the recommendations of the college of enrollment and the department that offers similar courses.

**Credit for experiential learning.** Experiential learning credit is not accepted for transfer admission purposes. A student who believes himself or herself to be knowledgeable in a specific course may be granted credit through established proficiency procedures by the college of enrollment and the department offering a similar course after admission and registration.

## Application Documents

An applicant for admission as a transfer student must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- A completed admission application form. Admission application forms are available from the Office of Admissions and Records at the address on the inside back cover.
- A \$25 (\$35 for foreign students) check or money order (amount subject to change), payable to the University of Illinois, in payment of the nonrefundable application processing fee. The University is not responsible for cash sent through the mail. Direct transfer applicants from the University of Illinois at Chicago are exempt from payment of this fee.
- An official high school transcript received directly from the high school of graduation.
- Official transcripts of all college work attempted received directly from the institution(s) attended.
- ACT or SAT test score received directly from the testing company, and high school class rank received directly from the high school attended. These are required only if the transfer student has less than 30 semester hours of graded transferable classroom credit at the time of submission of the application.

## READMISSION APPLICANTS

Applications for readmission are usually accepted until near on-campus registration time. Readmission to the *same academic program* will be approved for any applicant whose record is not encumbered and who (1) left the campus in good or probationary academic standing, (2) left any other campus subsequently attended in good academic and disciplinary standing, and (3) applies on or before November 1 for the spring semester or March 15 for the fall semester.

An applicant who desires readmission to a college other than the college in which he or she was previously enrolled may be readmitted only with the approval of the colleges concerned.

Clearance by the McKinley Health Center is required for the readmission of former students who are encumbered for medical reasons.

Clearance by the Office of Student Accounts and Cashiering is required for the readmission of former students who are in debt to the University.

## Application Documents

An applicant for readmission must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- A completed admission application form.
- An official transcript sent directly to the Office of Admissions and Records from each collegiate institution at which course work was attempted since last attendance at the Urbana-Champaign campus.
- A letter of petition if the applicant (1) left on drop status, (2) left on probation and is seeking readmission to a different academic program, or (3) was placed on “must petition” status by his or her college.

## APPLICANTS FOR SECOND BACHELOR’S DEGREES

A second bachelor’s degree applicant must meet the same requirements for admission as a transfer applicant for the first degree. In addition, the applicant is required to submit a petition indicating the reasons for his or her choice of program and campus; this petition must be approved by the director of admissions and records and the dean of the college concerned. When space in a college or curriculum is inadequate, priority will be given to applicants seeking their first degrees.

## APPLICANTS FOR ADMISSION AS NONDEGREE STUDENTS

Nondegree admission and enrollment are restricted to participants in special programs and to those with nondegree educational objectives that cannot be met at another institution. Permanent residents of the Champaign-Urbana area are given priority for nondegree admission. Nondegree applicants must choose one of two enrollment options:

*Academic Year.* Fall and spring semesters, with summers optional.

*Summer Session Attendance Only.* Enrollment not allowed for the fall or spring term; a separate application for admission is necessary to be considered for the academic year enrollment pattern (see pages 26).

An applicant holding a bachelor’s degree who desires to take any 300-level course for graduate credit or any 400-level course must apply for graduate nondegree status, regardless of the level of other courses in which the applicant desires to enroll. A graduate applicant should complete the Combined Application for Admission or Readmission to the Graduate College and Application for Graduate Appointment form.

## Nondegree Student Regulations

- Nondegree undergraduate students are assessed tuition at the upper-division rate.
- Enrollment is limited to part-time status (fewer than 12 credit hours of course work in any semester).
- Course enrollment requires the approval of the department offering the course and the college of enrollment at the beginning of each semester.
- Nondegree students may not advance enroll in classes or register by mail.
- Registration for the fall or spring term is not permitted until the fourth day of classes. The late registration charge will be waived for undergraduate nondegree students registering during the fourth and fifth days of classes.
- Registration after the fifth day of classes requires the written approval of the dean of the college of enrollment.
- The college has the privilege of terminating a continuing nondegree student’s enrollment before the student’s registration for any term.
- The same grading system is applicable to both degree and nondegree students. Credit earned on nondegree status will not be applicable to a degree except by subsequent admission to degree status.
- Undergraduates admitted for *summer session only* will not be permitted to register for 400-level courses or for graduate credit in 300-level courses. Students who wish to obtain graduate credit for courses taken on nondegree status must apply through the Graduate College.
- To be considered for degree-status enrollment, nondegree-status students must reapply for admission.
- Nondegree students admitted to a college for *summer to continue in the fall* have the option of registering for summer and continuing in the fall, or registering initially for fall.



## Application Documents

An applicant for admission as a nondegree student must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- A completed application form (prospective undergraduate nondegree applicants should specifically request the Undergraduate Nondegree Admission Application).
- A \$25 (\$35 for foreign students) check or money order (amount subject to change), payable to the University of Illinois, in payment of the nonrefundable application processing fee. The University is not responsible for cash sent through the mail.
- A transcript showing the applicant's highest level of academic achievement, if the applicant for the academic year option has no prior credit at the University of Illinois at Urbana-Champaign.
- A transcript showing course work completed since last enrollment at the University of Illinois at Urbana-Champaign, if the applicant has prior credit on this campus.

## ADMISSION TO CORRESPONDENCE COURSES

Correspondence courses are open to any applicant who can meet University entrance requirements and who is in good standing at the last school attended, and to any person eighteen years of age or older whose application is approved by the head of Guided Individual Study.

An application from a student who has been dropped from the University of Illinois or any other collegiate institution will be considered only upon the recommendation of the authorities of the campus or institution from which the student was dropped.

For further information, write to Guided Individual Study, University of Illinois at Urbana-Champaign, Suite 1406, 302 East John Street, Champaign, IL 61820.

## ADMISSION TO CLASSES AS A VISITOR

### Enrollment Guidelines

Visitors are not permitted in laboratory, military, physical education (other than theory), or studio classes.

A former student not currently registered must obtain the approval of the dean of the college in which he or she was last registered. Former students are not permitted to attend classes as visitors while on dropped status.

A student enrolled at the Urbana-Champaign campus who desires to attend a class as a visitor must obtain the written permission of the instructor of the class and the approval of the dean of his or her college.

A person who has never been a registered student at the Urbana-Champaign campus must obtain the required approval from the dean of the college in which the course is offered.

For additional information, contact the Office of Admissions and Records at the address on the inside back cover.

### Charges

Persons not registered, or registered for less than a full program (fewer than 12 semester hours), are charged a \$15 (amount subject to change) visitor's fee for each course attended. The fee is waived for persons sixty-five years of age or older.

Persons registered for a full program (12 semester hours or more) may visit other courses without additional charges. Students holding scholarships, tuition waivers, or staff appointments generally may audit University courses without charge.

## ADMISSION OF FOREIGN STUDENTS

The Office of Admissions and Records determines which students shall be classified as *foreign* according to the following definition: A person who is a citizen or permanent resident alien of a country or political area other than the United States and has a residence outside the United States to which he or she expects to return and either is, or proposes to be, a temporary alien in the United States for educational purposes is classified as a foreign student. For admission purposes, refugees-parolees and conditional entrants are classified as foreign and shall meet all requirements imposed upon foreign students except for the certification of financial resources.



Application Calendar: Foreign Applicants

Filing Period		Notification Time
Spring Foreign Applicants:		
One year in advance	All applicants for spring admission.	Decisions made and announced in order received
November 1	Absolute deadline for application.	
Summer and Fall Foreign Applicants:		
November 15	Best chance for admission.	Decisions made and announced in order received
January 1	Limited number of spaces may be available.	

Foreign undergraduate applicants are urged to submit admission applications and supporting documents approximately one year prior to the desired term of entry. Competition is extremely keen, and late applicants jeopardize their opportunities for admission. Additional information and application materials are available from the Office of Admissions and Records at the address on the inside back cover.

Admission Requirements

Admission is competitive, and preference is given to those applicants judged to have the best potential for academic success at the University of Illinois at Urbana-Champaign. The minimum requirements for admission are:

- Satisfaction of University minimum requirements in terms of age, high school graduation, high school units, and health (see page 15).
- Satisfaction of minimum requirements of the college and curriculum of choice in terms of high school subjects and any additional requirements prescribed for admission (see pages 14-15).
- Satisfaction of the University requirement of competence in English (see next section).
- Adequate financial resources (see Financial Verification Requirement section).

ENGLISH COMPETENCE REQUIREMENT

Evidence of English proficiency is required of students who request consideration for admission. This evidence is provided by a satisfactory score on the Test of English as a Foreign Language (TOEFL). Undergraduate applicants are exempt from this test if they have fulfilled one of the following requirements in a country where English is the primary language and in a school in which English is the primary language of instruction:

- Graduation with credit for 3 units, or the equivalent, of English; or
- Successful completion of a minimum of two academic years of full-time study at the secondary school or collegiate level immediately prior to the proposed date of enrollment in the University.

The Test of English as a Foreign Language (TOEFL) is administered several times each year at many locations throughout the world. To make arrangements to take the test, write directly to the TOEFL Application Office, P.O. Box 6151, Princeton, NJ 06151, U.S.A., or contact the nearest U.S. embassy or consulate, or U.S. Information Service office. Applicants who have already taken the test should request that the TOEFL office send their scores to the Office of Admissions and Records immediately. For admission purposes, TOEFL scores are valid for only two years prior to the proposed term of entry. If the TOEFL score is acceptable but indicates the need for further English study, a placement test will be required upon arrival at the University. On the basis of the placement test scores, applicants may be required to enroll in noncredit English courses and to take reduced academic loads.

In cases in which TOEFL testing dates are not available prior to the desired term of entry, the University will arrange for substitution of the Michigan English Language Assessment Battery (MELAB) test given by the English Language Institute Testing and Certification

Division at the University of Michigan. Complete instructions to arrange for the MELAB examination will be provided by the Office of Admissions and Records to each applicant for whom the test is required. Final admission status is determined after the test results have been received.

The minimum cutoff scores are 520 on the TOEFL and 80 on the MELAB. The English requirement for graduation is explained on page 76.

### **FINANCIAL VERIFICATION REQUIREMENT**

In order to qualify for a Certificate of Visa Eligibility (Form I-20 or IAP-66), a foreign applicants must submit complete and accurate information regarding his or her source of financial support. This information is required to comply with regulations of the U.S. Immigration and Naturalization Service. Current information and certification also are required of foreign applicants transferring from institutions within the United States. Financial resources must be documented for the entire length of time required to earn a degree. Expenses for the 1990-91 academic year were estimated at \$15,395, excluding summer session tuition and fees. This figure is subject to change without notice, is expected to increase yearly, and is presented here for planning purposes. Current estimated expenses may be obtained by writing to the Office of Admissions and Records.

Prospective students who cannot document the availability of sufficient resources will be denied admission.

University financial aid funds are extremely limited and are available only to participants in specific exchange programs. Individual requests for financial aid cannot be considered.

### **Application Documents**

A foreign student applicant for admission must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- An Application for Undergraduate Admission for Applicants from Other Countries.
- A \$35 (U.S.) nonrefundable application processing fee (amount subject to change) in the form of a check or money order payable to the University of Illinois. The University is not responsible for cash sent through the mail. The check must indicate that the bank has an affiliated bank in the United States.
- Official records for at least the last four years of secondary school study and/or any postsecondary or university-level work completed or attempted.

All records must list subjects taken, grades earned, or examination results (including those passed or failed in each subject); and all diplomas and certificates awarded. Official translations must be attached to these records if they are in a language other than English. All credentials must be certified by an officer of the educational institution attended or by the U.S. embassy or consulate. An applicant attending a U.S. or Canadian school should have credentials submitted directly by the school. Notarized copies of credentials do not fulfill official certification requirements.

A list of all courses in progress, including recently completed course work that is not listed on the transcript, must also be included on the application. When possible, an applicant must have a school official provide a statement of the applicant's rank in class. This statement should indicate the applicant's performance relative to the performance of other members of the secondary or postsecondary school class. Applicants to some fields may be required to submit additional materials, such as background information and aptitude test results, or to participate in auditions. These items will be requested by the Office of Admissions and Records when needed and will be required only for applicants satisfying all other admission criteria.

- The results of the Test of English as a Foreign Language (TOEFL) or the Michigan English Language Assessment Battery (MELAB) test, if required, as indicated on page 24.
- Declaration and certification of finances as required of all foreign students.

## **ADMISSION TO SUMMER SESSION**

### **Admission Procedures**

The procedure for admission of an undergraduate student to the eight-week summer session varies according to the previous status of the student.



<i>Previous Status</i>	<i>Action Required</i>
Completed immediately preceding spring semester; eligible to continue.	Application not required; registration materials produced automatically.
Dropped for academic reasons at end of spring semester; desire nondegree summer session only.	Do not apply for admission; seek release by former college to dean of summer session for approval.
Dropped for academic reasons at end of spring semester; seek reinstatement to same or different college for summer.	Do not apply for admission; petition dean of desired college for reinstatement.
Last campus enrollment was preceding fall semester or earlier.	Must apply for admission.

Students who have been approved for admission in the fall semester will be authorized to begin in the immediately preceding summer session if they notify the Office of Admissions and Records of their intent to enroll in the summer session.

## **Admission of Candidates for Degrees**

Freshman, transfer, or readmission applicants who wish to be admitted to the summer session and to continue as degree candidates in the fall semester must meet the same admission requirements as students applying for the fall semester. Such applicants should indicate on their application forms that they are applying for admission in June to continue in the fall. Detailed admission requirements and application procedures for undergraduates are contained in the application packet available each September.

Applicants for *summer to continue in the fall* should be aware that fall term admission spaces have been filled in most academic programs long in advance of summer session application deadlines. Information on programs open for admission can be obtained from the Office of Admissions and Records throughout the academic year.

## **Admission of Summer Session Nondegree Students**

Approval of admission or readmission as a nondegree student to the summer session only does not allow enrollment in the fall or spring. A student who was admitted to the summer session only as a nondegree student and who later wishes to enter one of the colleges of the University as a degree or nondegree students must apply for admission in the usual manner and satisfy requirements in effect at the time of application. A person admitted as a nondegree undergraduate student to the summer session only is not assigned to any college or curriculum.

Undergraduate nondegree applications for admission to the summer session only may be approved by the director of admissions and records or by the Summer Session Office under the following conditions:

- High school graduates who qualified for admission under minimum rank and test score combination requirements, but who were not admitted under competitive rank and test score combination requirements in effect for the fall semester, may be admitted as nondegree students for the summer session only. (These minimum rank and test score requirements, known as campus minimums, are available from the Office of Admissions and Records the September preceding the summer term for which admission is sought.)
- Former University of Illinois at Urbana-Champaign students who have not graduated from the University may be admitted as nondegree candidates if approved by the director of admissions and records through release from their former colleges. Students on drop or probationary status must petition the Summer Session Office for admission as nondegree candidates. If approved, they will be admitted on probation for that single summer session only.
- An undergraduate student enrolled in another institution may enroll in the summer session as a nondegree candidate if the student is eligible to return to the collegiate institution last attended.
- Any person eighteen years of age or older who has never attended a collegiate institution, but who gives evidence that he or she possesses the requisite background and ability to pursue profitably courses for which he or she is qualified, may enroll in the summer session as a nondegree candidate.



## Application Documents

An applicant for admission to summer session as a nondegree student must submit the following (all credentials presented for admission or readmission become the permanent property of the University, are not subsequently released to the student or to another individual or institution, and are not held for reconsideration of admission to subsequent terms):

- A completed admission application form. This form is available from the Office of Admissions and Records at the address on the inside back cover.
- A \$25 (\$35 for foreign students) check or money order (amount subject to change) payable to the University of Illinois, in payment of the nonrefundable application processing fee. The University is not responsible for cash sent through the mail.
- A list of the specific course work desired.
- Additional documents required of certain applicants, as follows:

A high school graduate (see first category under Admission of Summer Session Nondegree Students on page 26) may be required to submit (1) an official high school transcript received from the high school showing rank in graduating class, and (2) an official report of the admission test score (ACT or SAT) sent directly to the Office of Admissions and Records from the testing agency concerned

A teacher may be requested to submit a statement verifying his or her employment.

A student enrolled at another collegiate institution may be requested to submit a statement of eligibility to return to the institution attended.

## ADMISSION TO INTERSESSION

Intersession, a program of intensive instruction in certain credit courses, is conducted between the spring semester and the eight-week summer session. Admission requirements, application procedures, and a listing of Intersession courses are given in the summer session *Timetable*.

Persons eligible to register for Intersession courses are students registered in the immediately preceding spring semester, new students who have been admitted to the current summer session, students eligible to register in the current summer session, and students who successfully completed Intersession in the previous year.

Additional information and Intersession applications are available from the Office of Admissions and Records at the address on the inside back cover.

# Precollege Programs

Programs for Freshmen ..... 28

Programs for Transfer and Readmitted Students ..... 29

Program for Parents ..... 29

Additional Information ..... 29

## PROGRAMS FOR FRESHMEN

The University offers fall semester freshmen the opportunity to complete required testing, to become acquainted with the campus, and to receive academic advising and complete advance enrollment during a summer two-day period prior to the beginning of the fall semester. These opportunities are explained fully in the booklet *Get Ready for Illinois*, which is sent to all accepted applicants.

Freshmen entering in the fall semester who do not participate in the placement testing and summer orientation/advance enrollment programs must complete their required testing, academic advising, and class scheduling during the week immediately preceding the start of classes. Thus, participation in the precollege sessions is strongly urged to ensure a smooth transition to the University environment. Information about these activities is sent to new students before their scheduled arrival on campus.

Precollege programs are not available for freshmen entering the University during the spring semester; they must complete required testing, academic advising, and registration during the week immediately preceding the start of classes.

## Placement Testing

Placement tests are designed to help determine the levels at which students are best prepared to begin University study in particular subject areas. Scores of these tests are used for initial placement purposes only and are not recorded on student official academic records. The requirements for placement testing vary by college and curriculum, and the *Get Ready for Illinois* booklet provides full details on the required and optional tests.

During March, April, and May, beginning freshmen who have been admitted to the fall semester come to either the Urbana-Champaign campus or the University Center of the University of Illinois at Chicago campus to participate in a one-day program of required testing. The tests taken during this day are the Rhetoric Essay Test, and placement tests in mathematics, chemistry, and foreign languages. These tests must be taken by admitted students if they had these subjects in high school, but have not received college credit for them, and intend to pursue these subjects at the University either as required or elective courses.

Students who live outside of Illinois and more than 250 miles from Champaign-Urbana have the option of completing placement testing on the first day of the orientation/advance enrollment program.

An admitted freshman who fails to complete all required testing by the conclusion of the summer program will be assessed a \$25 late fee (amount subject to change) to take the tests immediately preceding the start of classes if (1) the freshman is a resident of Illinois and (2) the Notice of Admission to the University is dated prior to May 1.

## Academic Advising and Orientation/Advance Enrollment

A student who has completed the testing required by his or her college may participate in the two-day orientation/advance enrollment program conducted at the Urbana-Champaign campus during June and July. During that period, the student has an opportunity to learn about the expectations of professors and the level of academic standards at the University, as well as the chance to interact with other entering students and currently enrolled University students. Additionally, the new student is able to receive his or her student identification card and to become acquainted with the physical arrangement of the campus, housing facilities, and many other facets of campus life. If interested, the student also has the opportunity to audition for band and choral organizations.

The student's stay culminates in a meeting with an academic adviser who provides information about academic opportunities and requirements and assists the student in selecting a schedule of courses for the fall semester; the course requests of beginning freshmen who participate in the summer program receive priority in the scheduling of classes for the fall semester. Students participating in the program receive their fall class schedules in early August and then may register either by mail or during on-campus registration.

Since the placement test results are used by the colleges and academic departments concerned to evaluate student achievement levels and to assist in arranging class schedules, freshmen must complete all required testing before they can participate in summer orientation/advance enrollment.

A program charge includes one night's accommodations, three meals, and program events. The program charge is waived for any student who received an admission application fee waiver based on extreme financial hardship.

## **PROGRAMS FOR TRANSFER AND READMITTED STUDENTS**

New transfer and readmitted students have the opportunity to advance enroll for the fall semester during a special one-day program held during the summer. At that time the student meets with an academic adviser to discuss the transfer of credit for all previous college course work, to learn the student's status in terms of progress toward a degree from the University, and to select classes for the fall. The student also has the opportunity to meet in a small group with currently enrolled University students, to interact with other entering students, and to receive his or her student identification card. Each transfer and readmitted student receives details of the advance enrollment program in the *Get Ready for Illinois* booklet mailed with the Notice of Admission.

## **PROGRAM FOR PARENTS**

Parents are cordially invited and encouraged to accompany their sons and daughters to the campus for the summer program and to participate in a Parent Orientation Program. Through a variety of information sessions, parents will have the opportunity to meet and speak with campus administrators, faculty, students, and members of the Mothers and Dads Associations. A program charge includes one night's accommodations, three meals, and program events. Parents likewise may take advantage of the opportunity to tour the campus.

## **ADDITIONAL INFORMATION**

Questions concerning the precollege programs should be referred to:

Precollege Coordinator  
University of Illinois at Urbana-Champaign  
10 Henry Administration Building  
506 South Wright Street  
Urbana, IL 61801  
(217) 333-6427



## Special Opportunities

Advanced Placement Program .....	30
International Baccalaureate Examinations .....	33
Proficiency Examinations .....	34
College-Level Examination Program (CLEP) .....	34
Campus Honors Program .....	35
Edmund J. James Undergraduate Honors Programs .....	37
Transition Program .....	38
Educational Opportunities Program .....	39
Services for the Physically Disabled .....	40
Course Attendance by Illinois High School Students .....	40
Early Admission Program .....	41
Delayed Admission .....	41
Concurrent Enrollment .....	41
Study Away from Campus .....	41

Because of the comprehensive nature of the University of Illinois at Urbana-Champaign, arrangements for talented and highly motivated students differ among the various colleges and departments. Generally speaking, talented and highly motivated students are able to enter special courses or special sections of courses as freshmen and sophomores and are encouraged as juniors and seniors to participate in special programs for majors offered by the many departments. For details of these arrangements, see the descriptions in the college sections of this catalog.

Policies and procedures regarding placement and proficiency examinations, the College-Level Examination Program (CLEP), and the Advanced Placement Program are published in the current edition of *Opportunities for Advanced Credit*, a brochure available at college offices or by writing to the Office of Admissions and Records, University of Illinois at Urbana-Champaign, 10 Henry Administration Building, 506 South Wright Street, Urbana, IL 61801, (217) 333-0302.

## ADVANCED PLACEMENT PROGRAM

The Advanced Placement Program, administered by the College Entrance Examination Board, is designed for high school students who are about to enter college and wish to demonstrate their readiness for courses more advanced than those usually studied in the freshman year. Advanced classes are offered in many high schools in one or more of the following subjects: American and comparative government and politics, art history, art studio, computer science, English language and composition, English literature and composition, French language, French literature, German language, Latin, Spanish language, Spanish literature, biology, chemistry, mathematics (calculus), micro- and macroeconomics, physics, music literature, music theory, and social studies (American history and European history). A national examination in each subject, administered in May by the Educational Testing Service, is designed to measure the competence of students in terms of the point at which college study in that subject should begin. The University encourages high schools and their outstanding students to participate in this program.

Examinations are prepared and graded by national committees of high school and college teachers. They are graded on the following scale: 5, high honors; 4, honors; 3, creditable; 2, pass; and 1, fail. Grade reports are sent to the universities each student specifies at the time of the examination. Each department within the University of Illinois at Urbana-Champaign has the option of granting, or not granting, college credit and advanced placement on the basis of the board's grade.

Transfer students should refer to the section on Acceptance of Nontraditional Transfer

Credit on page 20 for the policy on accepting credit earned through the Advanced Placement Program.

Specific credit recommendations for beginning freshmen at the Urbana-Champaign campus are listed below. Assignment of credit for specific courses is dependent upon policies established by the individual departments and colleges and is subject to change upon annual review.

## **Art**

### **ART HISTORY**

Scores of 5 and 4 receive credit for Art 111 and 112 (8 semester hours).

Credit is not awarded for scores of 3 and 2.

### **ART STUDIO**

Portfolios must be submitted to the School of Art and Design for an evaluation in all studio areas.

## **Computer Science**

### **COMPUTER SCIENCE A**

Scores of 5 and 4 receive credit for Computer Science 105 (3 semester hours).

Credit is not awarded for scores of 3 and 2.

### **COMPUTER SCIENCE AB**

Scores of 5, 4, and 3 receive credit for Computer Science 121 (4 semester hours).

Scores of 2 receive credit for Computer Science 105 (3 semester hours).

## **Economics**

### **MICROECONOMICS**

Scores of 5 and 4 receive credit for Economics 102 (3 semester hours).

Credit is not awarded for scores of 3 and 2.

### **MACROECONOMICS**

Scores of 5 and 4 receive credit for Economics 103 (3 semester hours).

Credit is not awarded for scores of 3 and 2.

### **MICRO- AND MACROECONOMICS**

Scores of 5 and 4 receive credit for Economics 102 and 103 (6 semester hours).

Credit is not awarded for scores of 3 and 2.

## **English**

### **ENGLISH LANGUAGE AND COMPOSITION**

Scores of 5 and 4 receive credit for Rhetoric 105 (4 semester hours and exemption from the University rhetoric requirement).

Credit is not awarded for scores of 3 and 2.

### **ENGLISH LITERATURE AND COMPOSITION**

Scores of 5 and 4 receive credit for English 103 (3 semester hours) and Rhetoric 105 (4 semester hours and exemption from the University rhetoric requirement).

Credit is not awarded for scores of 3 and 2.

## **Foreign Languages**

### **FRENCH LANGUAGE**

Scores of 5 and 4 receive credit for French 205 and 207 (6 semester hours).

Scores of 3 receive credit for French 205 (3 semester hours).

Credit is not awarded for scores of 2.

### **FRENCH LITERATURE**

Scores of 5 and 4 receive credit for French 207 and 210 (6 semester hours).

Scores of 3 receive credit for French 210 (3 semester hours).

Credit is not awarded for scores of 2.

### **GERMAN LANGUAGE**

Scores of 5, 4, and 3 receive credit for German 211 (3 semester hours).

Credit is not awarded for scores of 2.

**LATIN**

Scores of 5, 4, and 3 receive credit and placement as follows:

*Vergil examination:* 3 semester hours of Latin credit and placement in Latin 201.

*Lyric examination:* 3 semester hours of credit for Latin 201 and placement in Latin 202.

Credit is not awarded for scores of 2.

**SPANISH LANGUAGE**

Scores of 5 and 4 receive credit for Spanish 103, 104, and 200 (11 semester hours).

Credit is not awarded for scores of 3 and 2.

**SPANISH LITERATURE**

Scores of 5 and 4 receive credit for Spanish 103, 104, and 200 (11 semester hours).

Credit is not awarded for scores of 3 and 2.

**Government****AMERICAN GOVERNMENT AND POLITICS**

Scores of 5 and 4 receive credit for Political Science 150 (3 semester hours).

Credit is not awarded for scores of 3 and 2.

**COMPARATIVE GOVERNMENT AND POLITICS**

Scores of 5 and 4 receive credit for Political Science 240 (3 semester hours).

Credit is not awarded for scores of 3 and 2.

**Mathematics and Natural Sciences****BIOLOGY**

Scores of 5 receive credit for Biology 110 and 111 (10 semester hours).

Scores of 4 receive credit for Biology 100 (3 semester hours) and 102 (3 semester hours).

Scores of 3 receive credit for Biology 100 (3 semester hours) and placement in Biology 102 or 103.

Credit is not awarded for scores of 2.

**CHEMISTRY**

Scores of 5 and 4 receive general chemistry lecture credit (6 semester hours) and placement in Chemistry 122 or 123.

Scores of 3 receive general chemistry lecture credit (3 semester hours) and placement in Chemistry 102 or 109. Students should take the departmental general chemistry proficiency examination.

Credit is not awarded for scores of 2.

**MATHEMATICS*****Calculus AB***

Scores of 5, 4, and 3 receive credit for Mathematics 120 (5 semester hours) and placement in Mathematics 132.

***Calculus BC***

Scores of 5, 4, and 3 receive credit for Mathematics 120 (5 semester hours) and 132 (3 semester hours) and placement in Mathematics 242.

Scores of 2 receive credit for Mathematics 120 (5 semester hours) and placement in Mathematics 132.

**PHYSICS*****Physics B***

Scores of 5 and 4 receive credit for Physics 101 and 102 (10 semester hours).

Scores of 3 make students eligible to enroll in Physics 101 or take a proficiency examination for that course. If an A or B grade is earned in the course or on the proficiency examination, credit will be awarded for Physics 101 and 102 (10 semester hours).

Scores of 2 make students eligible to take a proficiency examination in Physics 101, 102, 106, or 108.

***Physics C***

Scores of 5 and 4 will receive credit as follows:

*Part I—Mechanics:* Physics 106 (4 semester hours).

*Part II—Electricity and Magnetism:* Physics 107 (4 semester hours).

Scores of 3 are handled as follows:

*Part I—*Students may take a proficiency examination for Physics 106 or enroll in that course.

*Part II—*Students may take a proficiency examination for Physics 107 or enroll in that course.

Scores of 2 in Part I or Part II make students eligible, with the approval of the department, to take a proficiency examination in Physics 101, 102, 106, 107, or 108.



For additional information or to arrange to take a departmental proficiency examination, students should go to 233 Loomis Laboratory of Physics.

## **Music**

### **MUSIC LITERATURE**

Scores of 5 and 4 receive credit for MUSIC 110 (2 semester hours).

Credit is not awarded for scores of 3 and 2.

### **MUSIC THEORY**

A score of 5 receives credit for MUSIC 101 (3 semester hours); additional credit possible upon review by composition-theory faculty.

Credit is not given for scores of 4, 3, and 2.

## **Social Studies**

### **AMERICAN HISTORY**

Scores of 5 and 4 receive credit for History 151 and History 152 (8 semester hours).

Credit is not awarded for scores of 3 and 2.

### **EUROPEAN HISTORY**

Scores of 5 and 4 receive credit for History 111 and 112 (8 semester hours).

Credit is not awarded for scores of 3 and 2.

## **INTERNATIONAL BACCALAUREATE EXAMINATIONS**

The International Baccalaureate (IB) Program, sponsored by a Swiss foundation, offers a curriculum covering either the last two years of secondary education or the twelfth and thirteenth grades in a thirteen-grade system. Successful completion of the program is based on the completion of coursework and passage of internationally prepared examinations. The examinations are written at two levels of study: High Level, administered after a minimum of 240 hours of teaching time in a subject; and Subsidiary Level, administered after a minimum of 160 hours of teaching time in a subject.

The University of Illinois at Urbana-Champaign will award proficiency credit to new, continuing, and transfer students on the basis of scores from several International Baccalaureate examinations: anthropology, biology, chemistry, classics (Latin and Greek), economics, French, German, history, and philosophy. University departments establish policies for awarding proficiency credit and advanced placement for each score on the IB scale of 1 to 7. Those wishing to have such examination scores evaluated should request that official score transcripts be sent to the Division of Measurement and Evaluation, University of Illinois at Urbana-Champaign, 307 Engineering Hall, 1308 West Green Street, Urbana, IL 61801.

The University of Illinois at Urbana-Champaign may accept, for transfer purposes, IB credit awarded by another institution if the transfer student meets two requirements: (1) the student must have earned at least 12 semester hours of graded college-level classroom credit at that same institution or campus, and (2) the student must have earned classroom credit for a more advanced course in the same subject area at that same institution. The advanced course must be fully acceptable under University of Illinois at Urbana-Champaign transfer credit policies. Transfer students who have not met these requirements may request that official copies of their scores be sent to the Division of Measurement and Evaluation. Such scores will be evaluated using the same standards applied to the scores of continuing students at the University.

The specific credit and placement policies for International Baccalaureate examinations recognized by this campus are given below. This information is subject to change upon annual review by each department concerned.

### **Anthropology**

High and Subsidiary Levels: Scores of 7 and 6 receive credit for Anthropology 103 (4 semester hours).

### **Biology**

High Level: Scores of 7 receive credit for Biology 110 and 111 (10 semester hours); scores of 6 and 5 receive credit for either Biology 104 (4 semester hours) or Biology 103 (8 semester hours).

Subsidiary Level: Scores of 7 receive credit for Biology 100 and 102 (6 semester hours).

**Chemistry**

High Level: Scores of 7 and 6 receive credit for Chemistry 101 and either Chemistry 102B or Chemistry 102P (8 semester hours).

Subsidiary Level: No credit is granted.

**Classics—Latin**

High Level: Scores of 7 and 6 receive credit for Latin 103, 104, and 201 (11 semester hours).

Subsidiary Level: Scores of 7 and 6 receive credit for Latin 103 and 104 (8 semester hours).

**Classics—Greek**

High Level: Scores of 7 and 6 receive credit for Greek 101, 102, and 201 (12 semester hours).

Subsidiary Level: Scores of 7 and 6 receive credit for Greek 101 and 102 (8 semester hours).

**Economics**

High and Subsidiary Levels: Scores of 7 and 6 receive credit for Economics 101 (4 semester hours).

**French**

High and Subsidiary Levels: Scores of 7 and 6 receive credit for French 207 and 210 (6 semester hours); scores of 5 receive credit for French 210 (3 semester hours).

**German**

High and Subsidiary Levels: Scores of 7 and 6 receive credit for German 211 and 231 (6 semester hours).

**History**

High Level: Scores of 7 and 6 receive credit for History 112 and 152 (8 semester hours).

Subsidiary Level: No credit is granted.

**Philosophy**

High and Subsidiary Levels: Scores of 7 and 6 receive credit for Philosophy 101 (3 semester hours).

**PROFICIENCY EXAMINATIONS**

Proficiency examinations are offered in most courses open to freshmen and sophomores. A student may take proficiency examinations in more advanced undergraduate courses on recommendation of the head or chairperson of the department in which the course is offered and approval of the dean of the student's college. Departmental proficiency examinations are administered in individual sessions or scheduled group sessions during the semester. Departmental offices can provide information regarding test dates, places of administration, types of examination, and references that might be used when preparing for examinations. Course descriptions and prerequisites are listed in the *Courses* catalog. (See the inside back cover of this publication for locations at which the *Courses* catalog may be obtained.) Proficiency examinations are generally given without cost to students, but fees may be charged to defray the cost of proficiency examinations prepared by agencies outside the University.

All regulations governing proficiency examinations will be applied in the context that the University must reasonably accommodate a student's religious beliefs, observances, and practices in regard to scheduling of proficiency examinations if the student informs the person responsible for the scheduling of such examinations of the conflict within one week after being informed of the examination schedule. Any student may appeal an adverse decision.

An enrolled undergraduate student who passes a proficiency examination is given credit toward graduation for the amount regularly allowed in the course (1) if it does not duplicate credit counted for admission to the University or credit earned through some other testing program and (2) if it is acceptable in the student's curriculum. No official record is made of failures in these examinations, but some departments may keep records to prohibit students from retaking the examinations. General campus policy information regarding proficiency examinations can be found in the *Code on Campus Affairs and Handbook of Policies and Regulations Applying to All Students*.

Transfer students should consult page 19 for the policy on acceptance of proficiency credit for admission purposes.

**COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)**

This program exists for the purpose of awarding proficiency credit, or otherwise recognizing college-level competence achieved outside the college classroom. Two types of tests are



available: (1) the general examination covers the broad content of a study that might be expected to be covered by several introductory-level courses, and (2) the subject matter examination covers the specific content of a single college course. Credit can be earned and will be recognized by the University of Illinois at Urbana-Champaign for *some* CLEP General Examinations, but credit is *not* awarded for any of the CLEP Subject Matter Examinations.

Most students must fulfill general education requirements for degree purposes in four areas: humanities, social science/history, biological science, and physical science. CLEP General Examinations in humanities, social science and history, and natural sciences (subtests in biological science and physical science) can be used to earn waivers of the corresponding general education requirements, or parts of them, and to earn degree credit. Credit is not awarded by the University for scores from the CLEP General Examinations in English composition or mathematics. A CLEP test provides an opportunity for a student to demonstrate knowledge in a general subject area that is as thorough as that required of a graduate who has not majored in that particular area. General education requirements are designed to ensure that graduates of the University are generalists as well as specialists. The University recognizes that this general knowledge may have been acquired by entering students through high school work, independent study, extracurricular reading, projects, or work experience. CLEP General Examination scores can be used to earn 3 or 6 credit hours and waiver of all or part of the requirement in each of the four general education areas. College policies vary in terms of the tests that are acceptable for earning credit and waiver, and in terms of the scores required for partial or complete waiver of a requirement.

Students may take CLEP examinations at any CLEP National Testing Center designated by the Educational Testing Service (ETS), Box 966, Princeton, New Jersey 08540. Official score reports should be sent by ETS to Coordinator, Placement and Proficiency Testing, University of Illinois at Urbana-Champaign, 307 Engineering Hall, 1308 West Green Street, Urbana, IL 61801. Locations of CLEP National Testing Centers and test administration dates may be obtained by writing to ETS, or by inquiring at most college and high school counseling offices.

CLEP test scores earned by beginning freshmen at the Urbana-Champaign campus, including students with less than 12 semester hours of transferable classroom credit attempted at other collegiate institutions, are evaluated for credit according to norms established for the campus. Transfer students should refer to the section on Acceptance of Nontraditional Transfer Credit on page 20 for the policy on accepting credit earned through CLEP examinations.

CLEP examination scores reported by the Defense Activity for Non-Traditional Education Support (DANTES) testing centers will be evaluated against the same criteria that are applied to continuing students on the Urbana-Champaign campus.

## CAMPUS HONORS PROGRAM

The Campus Honors Program offers special challenges and opportunities to some of the most talented and highly motivated of the University's undergraduate students. It is designed to foster close, collaborative relationships between top students and distinguished faculty members. This collaboration occurs through small class sizes, which ensure close faculty supervision and maximum student-faculty interaction; through a faculty mentor system for introducing students to the intellectual standards and methodologies of their chosen academic disciplines; and through the many informal contacts encouraged by the program's cocurricular offerings. Currently, there are four series of noncredit cocurricular events: a Scholar Adventures lecture series on interesting research projects in various disciplines; a Study Abroad at Home series of seminar-workshops centering on the intellectual and cultural heritage of a particular country; a series of dress rehearsals at Krannert Center for the Performing Arts; and an informal lunch series. The consistent aim is to encourage breadth and excellence from the outset of the student's college career, and to facilitate close interaction with role models who are at the cutting edge of their academic disciplines.

Only 100 new students are admitted to the Campus Honors Program each year as freshmen, although it is possible to join the program on an off-cycle basis at the beginning of the sophomore year. Designated as "Chancellor's Scholars," students in the Campus Honors Program may be enrolled in any undergraduate curriculum. Those who meet retention requirements continue as Chancellor's Scholars during their entire undergraduate careers. Campus Honors Program coursework is concentrated in the freshman and sophomore years, when students take small, enriched versions of general education courses. At the junior and senior levels, when students are necessarily and appropriately involved in their major areas of specialization, they can continue to receive the benefits of the program by supplementing their



specialized coursework with interdisciplinary honors seminars. The emphasis is on fundamental principles and interdisciplinary connections, because the CHP is directed at students who desire an undergraduate education that is broad and general as well as professionally specialized.

It is important to understand that Campus Honors Program courses represent additional opportunities for academically gifted students, not a complete alternative curriculum. They provide an honors-quality way of satisfying general education requirements for graduation and of helping students to discover the interrelations between their own discipline and other disciplines. The program does not offer a major nor does it take the place of specialized departmental honors programs. Accordingly, most of the courses Campus Honors Program students take are regular University offerings. In consultation with a departmental academic adviser, each Chancellor's Scholar selects his or her own combination of regular and program courses. They are not required to take specific Campus Honors Program courses, but only to choose (over a three- or four-year period) from a varied menu of program offerings those four courses plus one capstone seminar that best fit the student's personal interests as well as his or her college and departmental curricular requirements.

## Benefits

As a small general studies program within a large state university, the Campus Honors Program combines the advantages of a major public institution (relatively low cost, vast resources, and cultural diversity) with those of a liberal arts college (the individual attention and opportunities for close personal interaction fostered by an excellent faculty-student ratio and restricted class size). Other opportunities provided by the program include:

- Challenging courses designed especially for Chancellor's Scholars with enrollment usually limited to no more than fifteen students,
- Intellectually-oriented faculty and peers,
- Grants of \$1,000 to fund student research projects during the summer and to support student domestic and foreign travel,
- Priority registration for classes,
- A variety of social and intellectual activities outside the classroom, including cultural events and seminars on topics of interest,
- Graduate student access to the University Library,
- Transcript notation of Chancellor's Scholar status,
- Access to personal computers and to a specially developed PLATO communications network,
- Free computer workshops on MacWrite and Word Perfect,
- Orientation and senior sibling programs for incoming students,
- Use of Honors House, an honors student center offering a conducive atmosphere for study and relaxation, and
- The personal satisfaction of realizing one's potential.

## Admission

An entering freshman with a high ACT/SAT score and an exceptionally strong high school record is automatically invited to apply for admission to the Campus Honors Program, but any incoming or currently enrolled freshman may ask to be considered. Acceptance is based upon such factors as standardized test scores, high school class rank and grade-point average, evidence of creative and leadership abilities as displayed in extracurricular interests and activities, and the strength of the application essay. The program is open to students in all majors offered on the Urbana-Champaign campus, and an effort is made to ensure that each incoming class of Chancellor's Scholars is broadly representative of the curricula of the University as a whole. The admission committee does its best to identify students who are strongly motivated not only to excel but also to contribute.

For additional information or to obtain an application form, contact the Campus Honors Program, University of Illinois at Urbana-Champaign, 1205 West Oregon Street, Urbana, IL 61801; (217) 244-0922. For full consideration, completed applications should be received by February 1 for admission the following fall.

## EDMUND J. JAMES UNDERGRADUATE HONORS PROGRAMS

Undergraduate honors programs, named for one of the University's distinguished presidents, Edmund J. James, provide a number of special curricular opportunities to academically talented undergraduate students. Designation by the University as "James Scholars" recognizes students of extraordinary ability and achievement. It entitles students to certain academic privileges, including the extended use of library facilities, and charges them with the responsibility for seeking sustained intellectual achievement throughout their undergraduate careers. James Scholar honors students are characterized by outstanding academic records; high general aptitudes for college work; and reputations for seriousness of purpose, persistence, and self-discipline in educational endeavors.

A student electing to participate in the program may enroll in any undergraduate curriculum; unusual academic arrangements are open to James Scholar honors students in all courses of study. These arrangements include provision of honors courses and sections, special seminars, and interdisciplinary colloquia. In addition, James Scholars are encouraged to pursue individual scholarly interests through independent study and research projects. Administrative coordination of all undergraduate honors programs is currently conducted by the Office of Admissions and Records.

There is no monetary award associated with this program, and students who need financial assistance should apply to the Office of Student Financial Aid.

### Nomination Procedures

Academic requirements for participation in the program are determined by the respective colleges. Undergraduates in most colleges may "self-nominate" into the program, provided that the decision is based on prior achievement and on high school and college faculty or administrative advice, and is accomplished prior to the terminal dates set for entry into academic programs leading to honors degrees. In the College of Liberal Arts and Sciences, entering students with higher than a predetermined college selection index are automatically admitted as James Scholar Designates. (See page 243 for further information regarding James Scholar honors students in Liberal Arts and Sciences.) Students may elect to leave the program or may be removed for failure to meet standards of academic performance in the various colleges.

During summer advance enrollment, freshmen in most colleges will receive additional information regarding specific college programs leading to honors degrees. At that time, in consultation with an adviser, a student may self-nominate into the program and select an honors course or plan other honors activities.

Although the honors program in each college varies in detail, any incoming freshman electing to undertake an honors program will enter the University as a James Scholar Designate. After completion of a period on campus, each designate's record will be reviewed by his or her college. The student then will be invited to continue as a full James Scholar honors student or advised to leave the program on the basis of criteria developed by the college. Resident and transfer students wishing to self-nominate into the program should inquire at their college offices.

### James Scholar Recognition

Successful performance for one year as a James Scholar honors student is recognized and recorded on the student's University record as Edmund J. James Scholar (year).

Specific inquiries regarding the honors program of a particular college may be addressed to the college office in care of the honors dean.

### Honors Credit Learning Agreements

It is not expected that a James Scholar honors student will take a full schedule of special courses; however, at least one honors activity each semester is considered normal. To encourage sustained independent intellectual activity by superior students, the campuswide Honors Credit Learning Agreement Program enables students to earn officially recognized honors credit in regular undergraduate courses. This is accomplished by a learning agreement between student and instructor whereby the student undertakes a special course-related



project. Upon successful completion of the project, the student is awarded transcript-designated honors credit for the course. Forms for initiation of honors credit learning agreements are available in the college offices. *Note:* This program is currently under review and may undergo minor changes in the future.

## TRANSITION PROGRAM

### General Description

The Transition Program is a campus-sponsored academic support program designed to provide assistance to students admitted to the University of Illinois at Urbana-Champaign, who have academic weaknesses that could place them "at risk" if they were permitted to enter the University without such assistance. As part of the Transition Program, such students are admitted to the general curriculum of the College of Liberal Arts and Sciences, where they may remain and receive developmental academic support for a period of as long as two academic years.

A space is reserved in the curriculum selected by each student in his or her application. If the student's performance is satisfactory in the Transition Program, he or she is then permitted to transfer to that curriculum. While the majority of students enrolled through the Transition Program will remain in the program through the end of the sophomore year, as is the case with most general curriculum students, transfer can occur earlier if the individual student meets the same requirements as other students pursuing the desired curriculum.

Through the Transition Program, students are provided with:

- Intensive academic advising and personal career counseling,
- The opportunity to enroll in support-based sections of existing courses, and
- Tutoring, diagnostic testing, developmental skills enhancement, enrichment activities, and other assistance as required.

### The Summer Bridge Component

Some of the students selected the Transition Program are provided with the opportunity to participate in the Summer Bridge Component, a seven-week summer session program sponsored by the College of Liberal Arts and Sciences. This program engages the students in intensive coursework in mathematics, writing, and basic skills development and, at the same time, orients them to the University and campus living.

Each Summer Bridge Component participant receives institutional financial assistance to cover the cost of tuition, fees, room, board, and books. In addition, *with the exception of students who will participate in intercollegiate athletics and who are not eligible for such added financial assistance under current National Collegiate Athletic Association regulations*, each participant will receive a stipend consisting of a modest weekly living allowance and a lump-sum payment at the end of the summer session, if he or she has successfully completed the program and is eligible to continue enrollment in the Transition Program in the fall.

### Selection of Students and Admission to the Program

Only those students who officially apply to the University in the prescribed manner and who meet established campus and program deadlines for application will be considered for participation in the Transition Program. The final decision on which students will be participants in the Transition Program is the joint responsibility of the director of admissions and records and the director of the Transition Program, acting on behalf of the College of Liberal Arts and Sciences.

General criteria to be employed in the selection of students for the Transition Program are as follows:

- If an applicant has a score of 17 or lower on the ACT<sup>1</sup> English *or* a score of 18 or lower on the ACT Mathematics subtest area, admission will be granted only through the Transition Program unless there is strong evidence that participation in the program is not necessary for the applicant's success.

---

<sup>1</sup>SAT equivalents: 17 ACT English = 310 SAT Verbal  
 18 ACT Mathematics = 380 SAT Quantitative  
 15 ACT English = 270 SAT Verbal  
 16 ACT Mathematics = 320 SAT Quantitative

---



- If an applicant has a score of 15 or lower on the ACT English *or* a score of 16 or lower on the ACT Mathematics subtest area, or if an applicant has a score of 15 or lower on the ACT English *and* a score of 16 or lower on the ACT Mathematics subtest areas, participation in the Summer Bridge Component of the Transition Program will be required unless there is strong evidence that participation in the Summer Bridge Component is not necessary for the applicant's success. Eligibility of Summer Bridge Component participants for fall enrollment is contingent upon acceptable academic performance in the summer program and recommendation by the director of the Transition Program.
- Other applicants may be invited or required to participate in the Transition Program or the Summer Bridge Component if, in the judgment of the director of admissions and records and the director of the Transition Program, such participation is necessary for the applicant's success at the University.

## Additional Information

Additional information about the Transition Program may be obtained by contacting the office of the director of the Transition Program, College of Liberal Arts and Sciences, 270 Lincoln Hall, 702 South Wright Street, Urbana, IL 61801, (217) 244-1588.

## EDUCATIONAL OPPORTUNITIES PROGRAM

### General Nature and Purpose

The Educational Opportunities Program (EOP), administered by the Office of Minority Student Affairs (see page 45), provides academic services and counseling support to students who (1) are academically underprepared or (2) come from backgrounds that are underrepresented on the Urbana campus. The program's emphasis is on supporting incoming students identified by the Office of Admissions and Records and college offices as being academically at risk in their preferred curricula.

Students in the program, along with many other students, receive financial support from federal loans and grants, Illinois State Scholarship Commission Monetary Awards, and University tuition waivers. They also contribute toward their expenses through family contributions, summer and part-time employment, and personal loans. Supportive services for the program are provided by federal and University funds.

Through the Educational Opportunities Program, the University is attempting to:

- Admit students who otherwise might not be able to undertake a college-level program at a major educational institution, and assist them in completing a baccalaureate degree. Participants receive the same benefits as other students and additional support if required.
- Increase the number of students from ethnic minority groups underrepresented on campus.
- Develop educational programs and policies, both academic and administrative, that will assist and support students in the program and that may well benefit all students.
- Provide students not in the program the vital cultural and social experience of meeting, living with, and learning from students from other cultures.
- Add ethnic diversity to the campus.
- Provide and disseminate to other educational institutions and agencies information that will increase their ability to deal with educational and sociological problems of students from nontraditional backgrounds.
- Provide information on securing financial aid, student employment, and postgraduate opportunities to program participants.

### Admission Requirements

Admission to the Educational Opportunities Program is limited to applicants from Illinois who are educationally or economically disadvantaged and who fall into one of the following categories:

- Beginning freshmen who meet the high school subject pattern requirements and the high school rank and test score combinations prescribed for the colleges and curricula of their choice.
- Students not meeting the stated academic requirements, if the deans of the colleges concerned and the director of admissions and records (or their designated representatives) concur.

It should be noted that in some curricula, such as the performing arts and aviation, additional requirements must be met. (See pages 14 and 15.)

## Supportive Services

Supportive services are available to help Educational Opportunities Program students meet a wide range of needs, as follows:

- Extensive academic advising, taking into consideration students' past educational achievements, test results, abilities, and interests. The optimal class schedules and course selections are determined by students in consultation with special academic advisers in the various colleges.
- Specially designed course offerings, including basic courses in rhetoric, mathematics, and psychology, and special class sections in regular courses.
- A Reading and Study Methods Clinic and Writing Laboratory to help improve reading, writing, and study skills.
- A tutoring system conducted by faculty members and students to help students in the program effectively approach and master subject content.
- An office with a specially trained staff to provide academic, social, personal, financial, and career assistance and general counseling.
- Precollege orientation programs to help students gain a greater awareness of the programs and services available at the University.

## Application

Applicants for participation in the Educational Opportunities Program must submit complete admission applications and arrange for their high school transcripts and test scores to be sent to the Office of Admissions and Records. They must also complete Financial Need Analysis Forms, indicating the desire to be considered for the Illinois State Scholarship Commission Monetary Award, the Pell Grant, and University aid.

Application forms and additional information about the program may be obtained from the Office of Admissions and Records.

## SERVICES FOR THE PHYSICALLY DISABLED

The design of the campus and the programming of the Division of Rehabilitation-Education Services afford students with physical disabilities full access to all campus academic and extracurricular programs. Division services are available to students with all causes and manifestations of physical disability, including paraplegics, quadriplegics, persons with cerebral palsy, the visually and hearing impaired, and many others. Services include physical therapy and functional training; counseling; transportation; occupational therapy and prosthetics; textbook Braille, tape, and reader service; medical services; and many others. An extensive program of recreation and sports is also available. The division works closely with the Housing Division and students to arrange appropriate housing.

Prospective students are urged to contact the division to request information about services and how to arrange for them, and are strongly encouraged to visit campus and the Division of Rehabilitation-Education Services well in advance of enrollment to plan for their needs.

## COURSE ATTENDANCE BY ILLINOIS HIGH SCHOOL STUDENTS

Qualified local high school students are permitted, while in high school, to attend University classes for college credit. They may also enroll for college credit in correspondence and extramural courses offered by the University.

To qualify for high school and on-campus University concurrent enrollment, a student must be recommended by his or her high school principal and have a 4.5 (A = 5.0) grade-point average. Students are assessed tuition at the regular *undergraduate nondegree student* rates.

Courses taken by these students involve work over and above the secondary school curriculum. Grades and course credits will appear on their permanent University records and on official transcripts. If these students enter the University after high school graduation, the courses, if applicable, will be credited toward University graduation.

A student applying for on-campus admission or readmission under this program should be prepared to submit the following materials upon request:

- A \$25 check or money order payable to the University of Illinois, for the nonrefundable application fee.



- A nondegree application for admission (or readmission) to the University (not required of students who were enrolled under this plan in the immediately preceding semester or summer session).
- An official copy of the student's high school transcript covering all work completed in high school and courses in progress, together with ACT or SAT test score if available. Acceptance under this program does not guarantee later acceptance as a degree candidate.

Information and applications for this program may be obtained from the Office of Admissions and Records at the address on the inside back cover. A separate undergraduate admission application is required if a student desires to attend the University after high school graduation or under the Early Admission Program described in the next section.

A student interested in correspondence study should request information and an application form as described on page 23. It is suggested that students begin correspondence study to coincide with the start of a fall or spring semester at the University. Applications should be submitted before the beginning of a semester. For the summer session, applications should be submitted by the middle of May.

## EARLY ADMISSION PROGRAM

Under the Early Admission Program, a high school student meeting competitive admission requirements *except receipt of a high school diploma* may be enrolled in the University after the junior year. This may reduce the length of the combined high school and college education by one year. Although each application is treated as a special admission case, a prospective student must have completed his or her junior year in high school, have earned approximately 15 units toward a high school diploma, be in good academic standing, be recommended by a high school staff member who is able to evaluate the student's work, and meet competitive admission standards. Those accepted in the program are enrolled in regular four-year curricula and treated as first-year students.

A student interested in this program may apply for admission no sooner than January preceding the fall term of planned entry so that the application can include complete information about the student's fall semester. However, application should be completed as soon as possible after January 1.

For complete information, contact the Office of Admissions and Records at the address on the inside back cover.

## DELAYED ADMISSION

A person approved for admission may request that the admission be delayed for a maximum of one year to allow participation in nonacademic pursuits. An applicant who wishes to consider this alternative should request further information from the Office of Admissions and Records at the time that he or she accepts the admission offer since the program is limited.

## CONCURRENT ENROLLMENT

### Students at Parkland College and the Urbana-Champaign Campus

A student in good academic standing at Parkland College or at the University of Illinois at Urbana-Champaign may concurrently enroll in courses offered by the other institution if such courses are not available at the student's primary campus. Prior written approval for concurrent enrollment must be obtained from the dean of students at Parkland College and the concerned college office at the University campus.

A concurrent enrollee is a part-time nondegree student at the secondary institution who pays the tuition and fees regularly assessed at that institution in accordance with the amount of work taken. The application fee is waived.

## STUDY AWAY FROM CAMPUS

The University permits a student who has been enrolled on campus for at least a semester or summer session, with the approval of the student's adviser and the appropriate departmental and college offices, to undertake independent study away from campus either in the United States or abroad.



Colleges and departments may establish variable credit courses that permit students, upon payment of an appropriate fee, to continue enrollment in the University while studying away from campus. Final determination of credit is made by the department and college concerned.

Overseas study programs offered by each college are described in the individual college sections of this catalog.

# Student Services

Information Services ..... 43

Counseling Services ..... 43

Career Services ..... 44

Extracurricular Activities ..... 44

Specialized Services ..... 45

Aids for Improving Academic Performance ..... 45

Medical and Health Services ..... 46

Housing ..... 46

Illini Union ..... 47

## INFORMATION SERVICES

### Campus Information Services

Campus Information Services at the north entrance to the Illini Union (333-INFO) answers questions and offers information about the University. If a student does not know exactly where to find help, the center will refer the student to the proper department.

## COUNSELING SERVICES

### Counseling Center

The Counseling Center’s offices are located in two settings: on the second floor of the Turner Student Services Building (333-3704) and on the third floor of the McKinley Health Center (333-8360). Clinical and counseling psychologists provide a variety of services addressing students’ vocational, academic, personal, and interpersonal problems. Services include workshops on specific topics such as test anxiety, intimate relationships, and intercultural stresses; reading and study methods classes; individual, couple, and group counseling; the Self-Help Information Center in the Undergraduate Library; and consultative services to University departments and staff.

### Dean of Students

The staff in the Dean of Students Office at 300 Turner Student Services Building (333-0050) provides general counseling to all students. Staff members are available to help students cope with whatever problems face them at the University, including sexual harassment, assault, discrimination, and grievances. A dean is available twenty-four hours a day to help in emergencies. Call the Emergency Dean at 333-0050 at any time for help.

### Minority Student Affairs

The Office of Minority Student Affairs (MSA) at 110 and 130 Turner Student Services Building (333-0054) provides leadership in developing, implementing, and coordinating student support services and activities designed to assist minority students’ personal development and academic achievement. MSA provides guidance and counseling support to minority students in all areas relevant to their persistence and success on campus, including general adjustment, financial aid, and career selection. Particular emphasis is placed on assisting students who come from backgrounds underrepresented on the campus or who are academically underprepared. By promoting and developing programs, and by collaborating with other Student Affairs campus units as they develop programs, MSA seeks to help minority students grow educationally and personally. MSA assists campus units and student organizations in creating environments and programs that will attract, support, and bolster minority students’ success and continuation at the University. MSA helps academic units monitor the progress of students and makes appropriate referrals to Student Affairs and/or academic units. MSA administers the federally funded Student Support Services (TRIO) and Project Upward Bound programs.

## Office of Student Financial Aid

Staff members on the fourth floor of the Turner Student Services Building (333-0100) provide information on the four main types of student financial aid administered by the University: scholarships, grants, loans, and employment. Employment counseling also is available to all students, whether or not they have applied for financial aid. For a more complete description of student financial aid programs and services, see page 60 of this catalog.

## CAREER SERVICES

### Career Services Center

The Career Services Center in 310 Turner Student Services Building (333-0820) offers students a wide range of career-related services, including individual and group counseling, assistance on job search efforts, general informational services, and help in identifying postgraduate employment opportunities. The 2,000-volume Career Resource Center has occupational literature and directory information, job search aids, government career information, and special interest resources to assist women and minorities with career and life planning. Each year, the center sponsors many on-campus career seminars and workshops of interest to the University community. The staff here also maintains permanent credentials/recommendations files for students registering for this service.

### Health Professions Information

The Health Professions Information Office at 901 Illinois Street, Urbana, (333-7079) provides advising and career counseling for students interested in dentistry, medicine, osteopathic medicine, optometry, pharmacy, and podiatry. This office maintains a complete collection of catalogs from U.S. health professional schools as well as information about foreign schools. A faculty evaluation service is provided for the pre-health-professional major. Counselors are available on an appointment basis to advise students on the preprofessional curriculum and help them apply to professional schools.

### Counseling Center

The center, with one location on the second floor of the Turner Student Services Building (333-3704) and one location on the third floor of the McKinley Health Center (333-8360), offers workshops and individual counseling to help students select careers and fields of concentration.

### College Placement Offices

Individual colleges and departments on campus sponsor their own job placement programs for majors. These offices provide employment counseling and job search training. Each office makes arrangements for employer representatives to conduct interviews on campus, and some departments furnish individual and group resume services.

## EXTRACURRICULAR ACTIVITIES

### Registered Student Organizations

This office at 284 Illini Union (333-1153) is the headquarters for registered student organizations. Information is available on more than 700 student organizations, representing a wide variety of professional, social, recreational, athletic, and religious interests.

### Illini Union Board

This organization, more commonly known as IUB, provides and directs cultural, educational, social, and recreational programs of an all-campus nature. Events such as the annual Dad's Day and Mom's Day celebrations and the Homecoming Court Program are coordinated by the IUB, along with concerts, films, and lectures. IUB also sponsors the Block I football cheering section, Quad Day, Activity Day, and the spring and fall musicals, as well as publishing the *Illinibook*. The IUB office is located at 284 Illini Union (333-3660).



## **SPECIALIZED SERVICES**

### **Educational Opportunities Program**

Students who enter the University of Illinois under the auspices of the Educational Opportunities Program (EOP) are eligible for extensive academic services through the Office of Minority Student Affairs (MSA), located at 110 and 130 Turner Student Services Building (333-0054). Participants with academic need may receive individual or small-group tutorial assistance in most disciplines. The MSA staff provides academic, financial, career counseling, and study skills assistance for all students admitted to the University under the auspices of the EOP.

### **International Student Affairs**

The Office of International Student Affairs (OISA) at 510 East Daniel Street, Champaign, (333-1303) provides a variety of services to international students at the University of Illinois including advice and counsel on matters affecting their adjustments to a new academic system and culture. The office provides students with administrative support for employment clearances and financial matters, and ensures that a broad range of programs is offered across campus to highlight its international flavor. American students may get involved with the office through the volunteer student group called Student Diplomats. For further information, contact OISA.

### **Veterans Affairs**

The Office of Veterans Affairs on the fourth floor of the Turner Student Services Building (333-0100) administers the GI Bill and other veterans educational benefits programs.

### **Office of Women's Programs**

Services for students are administered at 2 Turner Student Services Building (333-3137). Special programs include Campus Acquaintance Rape Education (CARE), a Women's Programs Paraprofessionals peer advising group, a Women's Resources Directory, a newsletter, workshops, speakers, the Verdell Frazier Young awards for women who are continuing interrupted educations, and a library of materials of concern to women. The staff has general information especially for traditional-age and reentry-age women students.

## **AIDS FOR IMPROVING ACADEMIC PERFORMANCE**

### **Counseling Center**

The Counseling Center at the Turner Student Services Building offers noncredit, nongraded classes designed to improve reading speed, comprehension, and general study skills. Classes are taught in small groups with individual instruction provided when necessary. A nominal fee is charged. In addition, a Study Assistance Lab is available, free of charge, to provide students with an opportunity to receive individual assistance with their study-related problems. For more information, call 333-3704.

### **Writing Laboratory**

Rhetoric 103 (Writing Laboratory) is open to any student admitted to the University through the Educational Opportunities Program (EOP) in conjunction with regular rhetoric courses. Rhetoric 103 is designed primarily as an adjunct to Rhetoric 104 and 105, and Speech Communication 111 and 112. A student may enroll on his or her own initiative, be placed in the course on the basis of test scores, or be referred by a rhetoric instructor.

The tutorial meets weekly, and the student receives 1 semester hour of credit on a satisfactory/unsatisfactory basis. The tutorial is devoted to individual writing problems and may be repeated for a total of 2 semester hours of credit.

### **Supportive Instruction**

Academic assistance is available to students admitted under the auspices of the Educational Opportunities Program (EOP), as described on page 39. Some departments have established revised courses and/or sections in existing courses for this purpose, and a faculty and student tutoring system has been developed. The program offers supplemental instruction and intensive reviews for several courses.

## **MEDICAL AND HEALTH SERVICES**

### **McKinley Health Center**

All students registered in University courses for residence credit at the Urbana-Champaign campus are assessed a Health Service Fee. This nonwaivable fee supports the health care services available to students at the McKinley Health Center at 1109 South Lincoln Avenue, Urbana. These services include the following: diagnosis, treatment, and follow-up of acute and chronic medical illnesses; mental health care; and health promotion. The majority of services are provided by appointment. For further information about the McKinley Health Center, call 333-2701. (See Student Health Insurance, page 57.)

## **HOUSING**

Housing for students at the University of Illinois at Urbana-Champaign is provided in University residence halls, fraternities, sororities, private residence halls and homes, and cooperative houses.

Present regulations require that all single undergraduate men and women students live for the entire academic year in housing that is certified by the University, unless the student reaches the age of twenty-one or achieves 30 semester hours of earned academic credit by August 15 of the academic year.

Housing that is certified includes University residence halls, fraternities and sororities, and privately owned housing that meets University standards. Within this system, there is a wide range of facilities, rates, and services offered.

Information about housing is presented in greater detail in a brochure mailed to each student with the Notice of Admission to the University of Illinois at Urbana-Champaign. If additional information is needed, the student may write to Certified Housing/Housing Information Office, 2 Turner Student Services Building, 610 East John Street, Champaign, IL 61820.

Students are encouraged to visit the office to discuss privately owned housing arrangements with a housing consultant. Office hours are from 8 a.m. to noon and from 1 to 5 p.m. Monday through Friday, except on holidays.

### **University Residence Halls**

Approximately 8,800 men and women live in twenty-three University residence halls. Any single undergraduate student qualified to enter the University may apply for residence hall accommodations. Room assignments are made in accordance with the University of Illinois policy on nondiscrimination.

University residence halls are located at points convenient to most areas of the main campus. Individual halls accommodate from 51 to 658 students, largely in double and triple rooms. Residence halls offer a room-and-board plan with twenty meals served each week, but room-only contracts are available in two halls.

A University residence hall contract is sent to each student who is accepted for admission. The completed contract should be returned promptly if the student desires accommodations in a University residence hall.

### **Privately Owned Certified Housing**

Privately owned residence halls, ranging from large, coeducational room and board halls to smaller, supervised suite-living arrangements, are available. All meet educational, safety, fire, and health requirements of the University. Smaller clusters of students live in other facilities offering a room-only or a room-with-kitchen-privileges option. All are within the campus community and are a short walk to the Quad.

A descriptive list of these facilities is available from the staff in the Certified Housing/Housing Information Office, 2 Turner Student Services Building, 610 East John Street, Champaign, IL 61820 by writing or visiting the office or by calling (217) 333-1420.

### **Sororities**

Membership in sororities is by invitation. Invitations may be issued after formal and/or informal rush functions. In most cases, an upper-class student pledged by a sorority moves



into the chapter house at the beginning of the following year. Freshmen pledged to sororities move into the house as room is available, often during the sophomore year. Twenty-six are affiliated with the Panhellenic Council.

The major formal rush occurs early in the fall, with informal rush periods continuously through the year. The dates for the rush periods and a description of the kinds of rush may be obtained by writing to the Panhellenic Council, University of Illinois at Urbana-Champaign, 274 Illini Union, 1401 West Green Street, Urbana, IL 61801.

## **Fraternities**

There are fifty-four nationally affiliated fraternities with approximately 3,000 members at the Urbana-Champaign campus. Fifty fraternities have living accommodations for most of their members, with an average occupancy of fifty men. The opportunity for membership in a fraternity exists whether the student lives in a fraternity house or not. Costs for room and board in fraternity houses vary, but are not significantly greater than those in other housing facilities.

Membership in fraternities is by invitation. Invitations are issued after formal and/or informal rush functions. The Interfraternity Council mails rush information to men upon their acceptance to the University.

Rush periods occur throughout the fall and spring semesters. Additional information on fraternities may be obtained from the Interfraternity Council, University of Illinois at Urbana-Champaign, 274 Illini Union, 1401 West Green Street, Urbana, IL 61801.

## **Housing for Student Families**

There are approximately 1,000 University-owned apartments, some of which are available to undergraduate student families. There is also a variety of privately owned housing facilities in the community. An application for University-owned apartments can be obtained by writing to the Family Housing Office, University of Illinois at Urbana-Champaign, 1841 Orchard Place, Urbana, IL 61801.

A listing of privately owned furnished and unfurnished apartments with rental rates, and other information is available for review in the Certified Housing/Housing Information Office, 2 Turner Student Services Building.

Generally, March 15 to July 1 and November 1 to December 15 are considered the most desirable times to visit the campus to arrange for apartment accommodations for the first and second semesters, respectively.

## **University Policy on Nondiscrimination in Housing**

In the rental of housing that is University-owned or University-certified, or of uncertified housing (apartments, uninspected rooming houses, etc.) that is listed with Certified Housing/Housing Information Office, the University of Illinois policy on nondiscrimination shall be followed. The University makes every effort to ensure that accepted listings include only those owners or managers who comply fully with its nondiscriminatory housing policy.

If anyone has any reason to believe that an owner or manager of certified housing or any other listed housing has illegally discriminated against an individual, this information should be communicated directly to the Housing Discrimination Committee in care of 2 Turner Student Services Building, 610 East John Street, Champaign, IL 61820.

## **ILLINI UNION**

Located in the middle of campus, the Illini Union is a center of services and activities for the entire University community, serving students, faculty, staff, alumni, and visitors since 1941.

Within the Illini Union are four different food services, a vending room, twenty bowling lanes, twenty-one billiards tables, video games, and a ticket box office. The Illini Union also offers free check cashing, an art gallery, study lounges, a campus information desk, and a book center. Other services include guest rooms, a University lost-and-found, the travel center, and special facilities for presentations, short courses, conferences, and meetings sponsored by University organizations.

Student Costs

Student Expenses ..... 48

Tuition and Fees ..... 48

Late Registration ..... 49

Flight Training Courses ..... 49

Payment Requirement ..... 49

Residence Classification for Admission and Tuition Assessment ..... 50

Installment Plan for Paying Tuition, Fees, and Housing Charges ..... 50

Refunds ..... 50

Exemptions and Waivers of Tuition and Fees ..... 51

Student Health Insurance ..... 57

STUDENT EXPENSES

Tuition, fees, and housing charges for the 1991-92 and 1992-93 academic years were not available when this catalog was published. An undergraduate student budget for the 1990-91 academic year is shown in Table 3. Although student expenses are expected to increase, this budget can be used for planning purposes.

Information about tuition and fee charges for a current academic term, including charges for flight instruction and special programs, waivers and exemptions, and refunds, is available from the Registrar's Office, Window 25, 100 Henry Administration Building, (217) 333-0210.

Table 3: Estimated Undergraduate Student Expenses for the 1990-91 Academic Year

(Average expenses for *single, undergraduate* students are shown below. This budget covers a full program of study for two semesters exclusive of such items as recreation and major articles of clothing. \*)

	Illinois Residents	Nonresidents
Tuition (freshmen and sophomores) .....	\$ 2,130	\$ 5,670
Fees .....	738	738
Textbooks and other school supplies .....	450	450
Meals and housing (includes double room and board residence hall charges of \$3,636, and \$16 Residence Hall Association dues) .....	3,652	3,652
Travel allowance .....	400	400
Personal expenses (includes Sunday evening and other nonprovided meals and miscellaneous expenses at moderate level) .....	1,480	1,480
Total: Two semesters .....	\$ 8,850	\$12,390

\*An additional \$246 for tuition must be added for juniors and seniors who are Illinois residents, and \$738 must be added for juniors and seniors who are not residents of Illinois. An additional \$310 travel allowance must be provided for students from states not adjacent to Illinois.

TUITION AND FEES

Tuition and fees for undergraduate students who were enrolled on campus in fall 1990 are shown in Table 4, page 59. Charges are assessed on the basis of the student's college of enrollment (undergraduate, graduate, or professional); classification as resident or nonresident of Illinois; and credit range as determined by the total number of semester hours or graduate units for which the student is registered. There is also a tuition differential for upper- and lower-division undergraduate students. For assessment purposes, nondegree undergraduate students are considered upper division.



Undergraduate credit is counted in semester hours. Credit for graduate work is counted in units. For fee assessment purposes, 1 unit equals 4 semester hours. A full-time undergraduate student is one who is registered for 12 or more semester hours of credit.

The Service Fee supports operation of certain campus facilities such as the Illini Union, Turner Student Services Building, Assembly Hall, and the Intramural Physical Education Building. The Health Insurance Fee covers the cost of the University Student Health Insurance Program that provides worldwide hospital, medical, and surgical insurance coverage. The Health Service Fee provides health care and limited prescription service at the campus McKinley Health Center and helps support the Counseling Center. The General Fee supports certain fixed costs of campus fee-supported buildings such as the Assembly Hall and the Illini Union. The Transportation Fee finances a campus and community busing plan for students.

Students are also assessed:

- \$4 each semester for SEAL (Students for Equal Access to Learning) to supplement existing financial aid for needy students. A refund is available upon request during the seventh and eighth weeks of instruction in a semester for students not desiring to participate.
- \$5 each semester and summer session for SORF (Student Organization Resource Fee) to help support the Student Legal Service and the programs and services of registered student organizations. Refunds are available upon request during the fifth and sixth weeks of instruction in a semester and summer session.
- \$2 each fall semester and \$1 each spring semester to support the Student Government Association (SGA).

LATE REGISTRATION

Students who register after on-campus registration in any semester, including University staff and persons who submitted admission applications too late to be processed before on-campus registration, must pay a Late Registration Fine of \$15 (amount subject to change). (This fine is not covered by scholarships or tuition waivers. It may be waived under exceptional circumstances upon petition to the director of admissions and records. The petition form is available from the Fee Assessment Section, Window 25, 100 Henry Administration Building.)

FLIGHT TRAINING COURSES

In addition to the regular tuition and fees, students taking flight training pay:

AVI 101—Private Pilot I .....	\$1,735
AVI 102—Orientation Refresher .....	900
AVI 120—Private Pilot II .....	2,223
AVI 121—Private Pilot IIA .....	1,187
AVI 130—Commercial-Instrument I .....	1,967.50
AVI 140—Commercial-Instrument II .....	2,020.20
AVI 200—Commercial-Instrument III .....	2,215.70
AVI 210—Commercial-Instrument IV .....	2,207.70
AVI 211—Commercial-Instrument V .....	3,748
AVI 220—Flight Instructor .....	1,751.50
AVI 222—Instrument Flight Instructor .....	1,037
AVI 224—All Altitude Orientation .....	960
AVI 280—Special Rating (Multiengine Land) .....	1,392.80
AVI 291—Special Ratings and/or Specialized Flight .....	1,485
AVI 292—Professional Multiengine Indoctrination .....	777
AVI 293—Corporate-Jet Pilot Orientation .....	590

(These fees for 1990-91 are subject to change and are *not* covered by scholarships or tuition and fee waivers.)

RESIDENCE CLASSIFICATION FOR ADMISSION AND TUITION ASSESSMENT

The residence classification of applicants for admission is determined on the basis of the information given on their applications and other credentials. Eligibility for admission to the University is determined and tuition is assessed in accordance with this decision.

Persons who take exception to the residence status assigned to them should refer to Paragraph 13 of the residence regulations on page 365, Appendix D.

## **PAYMENT REQUIREMENT**

Tuition and fees assessed for any semester, term, or summer session are due and payable in full by the deadline indicated on the Registration Statement of Charges and Aid. The privilege of paying these charges by installment may be granted by the Office of Student Accounts and Cashiering (see below). Students who do not make full or first installment payment by the scheduled due date shown on the statement will be assessed a \$25 (amount subject to change) charge for late registration payment, which will be billed to their student accounts.

A delinquent service charge of 1.5 percent per month, or \$2 per month, whichever is greater, is added to delinquent student accounts. The delinquent service charge is applied to all items charged to the student account and for which payment is delinquent.

## **INSTALLMENT PLAN FOR PAYING TUITION, FEES, AND HOUSING CHARGES**

Students enrolled on campus may pay tuition and fees, single student residence hall charges, and flight instruction fees on an installment plan. This plan is not available to students registered in extramural, correspondence, and intersession courses, or to students for whom this privilege has been denied.

Under the installment plan, semester charges are collected in three installments. The first is payable during the first ten days of instruction, and the remaining ones are payable in each of the two following months. Approximately one-half of the summer session charges must be paid during the first seven days of instruction with the remainder due during the following month. There is a finance charge of 1 percent of the amount deferred, or \$2, whichever is greater, when charges are paid in installments (amount subject to change).

Students who pay their accounts on the installment plan and later withdraw from the University, or reduce their registration to a lower credit range after the established refund deadline date, are liable for the full amount of tuition and fees assessed.

Installment payments are delinquent on the first day of the month after the date that payment is due. A delinquent service charge of 1.5 percent per month, or \$2 per month, whichever is greater, is added to delinquent accounts (amount subject to change). The delinquent service charge is applied to all items charged to the student account and for which payment is delinquent.

Students who are in debt to the University at the end of any academic term may not be permitted to register in the University again. They are not entitled to receive diplomas or official statements or transcripts of credits until either the indebtedness has been paid or suitable arrangements for payment have been made, unless either there is a pending bankruptcy petition of the student seeking a discharge of all such indebtedness or all such indebtedness has been discharged.

## **REFUNDS**

### **Cancellation of Registration**

Individuals who sign and return a Registration Agreement and later decide not to attend the University may cancel their registration before the end of the first day of classes.

If a request to cancel registration is received in the Office of Admissions and Records by 5:00 p.m. on the last day of on-campus registration, a student's registration agreement will be cancelled and tuition and fees will not be charged.

A student who has not attended any classes or received any student services may cancel the registration agreement up to 5:00 p.m. on the first day of classes in a term if the student obtains the approval of his or her college. To be relieved of the obligation to pay tuition and fees, the student must surrender the permanent ID card and/or the individualized validation label that accompanies the Registration Statement of Charges and Aid. These items must be returned immediately to the Fee Assessment Section, Window 25, 100 Henry Administration Building, or by mail addressed to the Office of Admissions and Records.

Students may not cancel the registration agreement once they have either attended a class or used other fee-supported services. If they leave the University, they must officially withdraw from the University.



## Withdrawal from the University

Students who have been charged tuition and/or fees and later withdraw from the University during an official refund period are assessed a nonrefundable charge in the amount of one-half of the Service Fee and the General Fee, plus the full Health Insurance Fee, Health Service Fee, and Transportation Fee (rounded if necessary to the next higher even dollar), or \$30, whichever is greater. They continue to be covered by the health insurance program and are eligible to receive McKinley Health Center services, if fees for insurance and health service were paid, until the first day of on-campus registration for the next term. Use of intramural recreation facilities also is permitted. Students who have been exempted from the payment of any of these fees will have the nonrefundable charge reduced by the amount of the appropriate fee(s).

Official refund periods are as follows:

- In a semester, twelve-week term, or eleven-week summer law program, full refund, except for the nonrefundable charge, during the first ten days of instruction; no refund thereafter;
- In an eight-week summer session, full refund, except for the nonrefundable charge, during the first seven days of instruction; no refund thereafter; and
- For University terms of different lengths, refund periods are determined proportionately in accordance with the above principles.

In case of extenuating circumstances, such as medically documented serious illness or injury, exception to these refund periods may be made by the director of admissions and records. The petition form to request a refund is available at Window 25, 100 Henry Administration Building.

## Reduction of Program

Students who paid tuition and/or fees and later reduce their registration to a lower credit range, as indicated in Table 4, receive full refund of the difference in tuition and fees specified for the ranges if the change is made during the periods designated above for withdrawal from the University. Thereafter, no refund is allowed.

## EXEMPTIONS AND WAIVERS OF TUITION AND FEES

Appearing below are the waivers and exemptions available to students and the conditions under which they are granted.

Recipients of *waivers* have had the amount for the service actually assessed and then waived by University policy. Such recipients are therefore eligible to receive the benefits of the service provided by the charge.

An *exemption* carries no original charge, so recipients are not eligible to receive the benefits of the services provided by the charge. Students exempt from any particular charge may make individual arrangements with the service provider; such arrangements are subject to the policies of the individual provider.

Unless otherwise exempted by Board of Trustees authorization, the payment of tuition and fees is required of academic employees of the University or allied agencies under appointment for less than 25 percent of full-time service, and of nonacademic employees under appointment for less than 50 percent of full-time service.

For tuition and fees assessment purposes, a staff appointment must be to an established position for a specific amount of time and a salary commensurate with the percentage of time required, and it must require service for not less than three-fourths of the academic term. Note: A term is defined as running from the first day of registration through the last day of final examinations. Three-fourths of a term is defined as ninety-one days in a semester and forty-one days during the eight-week summer session. Staff tuition and fees privileges do not apply to students employed on an hourly basis in either an academic or nonacademic capacity, or to persons on leave without pay.

University employees appointed to established civil service positions whose rates of pay are determined by negotiation, prevailing rates, and union affiliation are not considered as paid on an hourly basis and are entitled to the same tuition and fees privileges accorded to other staff members under the regulations.

A student who resigns a staff appointment, or whose appointment is cancelled before rendering service for at least three-fourths of the term, becomes subject to the full amount of the appropriate tuition and fees for that term unless the student withdraws from University

classes at the same time or before the appointment becomes void, or the student files a clearance form for graduation within one week after the resignation date.

Students holding appointments, either as employees or as fellows, to the close of the second semester, and for whom tuition and/or the Service Fee have been provided by exemption or waiver, are entitled to the same exemption of tuition and/or the Service Fee for the summer session or term immediately following, providing they hold no appointments during the summer session or term.

Tuition and fee waivers are not granted for the Executive M.B.A. Program or other self-supporting programs.

## Application Fee

Applicants for admission must submit a \$25 (\$35 for international applicants) application fee (amount subject to change) to help defray processing costs. The fee is nonrefundable to applicants approved for admission and to denied applicants who submit complete or partial applications prior to the date all admission spaces are filled in the college and curriculum of their choice. Application fees will be returned to persons applying for admission to curricula that were closed to further admission or to programs not being offered.

Exempt from payment of the application fee are:

- Readmission applicants who are applying for a degree program if their last enrollment at the Urbana-Champaign campus was as an undergraduate degree candidate.
- Readmission applicants to the Graduate College who are applying to a graduate degree program in which they were enrolled within five years preceding the date of application.
- Faculty and academic professional staff members and persons retired from the academic staff.
- Permanent nonacademic employees of the University and other institutions and agencies under the University Civil Service System who have been assigned to established permanent and continuous nonacademic positions and who are employed for at least 50 percent of full time.
- Staff members of certain specifically identified related agencies who are authorized tuition and/or Service Fee waivers.
- Summer-session-only graduate degree applicants after their first registration for on-campus work.
- Students registered at the University of Illinois at Chicago who wish to enroll at the Urbana-Champaign campus for the summer session only.

Waivers of the application fee are authorized for:

- Applicants who, because of extreme financial hardship, cannot meet the cost of the fee. In general, evidence of extreme financial hardship is a family income at or below the low standard family budget of the Bureau of Labor Statistics or the receipt of a testing waiver from the American College Testing Program of the College Entrance Examination Board. Applicants currently attending another collegiate institution may provide evidence of the financial package received at the institution.
- Applicants under approved foreign exchange programs in which the University participates, such as the Latin American Scholarship Program of American Universities and the African Scholarship Program of American Universities, and foreign students participating in approved exchange programs in which the waiver of fees is reciprocal.
- Intercampus transfers at the same level: undergraduate to undergraduate, or graduate to graduate.
- Applicants requesting a change in admission consideration from one campus of the University of Illinois to another for the same level and term. This would include applicants denied admission on one campus as well as applicants wishing to cancel admission or admission consideration on one campus for similar consideration on another campus. Students applying simultaneously to two campuses must pay the application fee at each campus. Undergraduate students applying for admission to a professional or graduate college on either of the two campuses must pay the application fee.
- Students from other universities participating in the Committee on Institutional Cooperation (CIC) Program by taking courses at the University of Illinois.
- Persons who are applying for CIC-supported fellowships to study at a CIC member institution.



- Graduate and professional applicants whose entry is advanced or delayed by action of their major departments are not required to pay a second application fee.
- University of Illinois students applying for work on a second campus as concurrent registrants, non-University of Illinois students applying as concurrent registrants from another institution with which the University has a reciprocal agreement, and students who have been concurrent enrollees the immediately preceding term and who plan to return to their primary campuses the following term.
- Cooperating teachers and administrators who receive assignment of practice teachers, who receive assignment of students meeting the clinical experience requirement in teacher education, or who cooperate in research projects related to teacher education, cooperating librarians, school-nurse teachers, social welfare field supervisors, recreation field supervisors, health-education field supervisors, speech pathology supervisors, developmental child care field supervisors, educational psychology supervisors, continuing education supervisors, industrial relations field supervisors, and physicians participating without salary in the instructional program of the University of Illinois College of Medicine at Urbana-Champaign.
- Students on leave-of-absence status on reentry.
- Illinois Teacher of the Year recipients.

## Waiver of Tuition

Tuition is waived for:

- All faculty and academic professional employees (excluding graduate assistants) of the University on appointment for at least 25 percent of full-time service, provided the appointments require service for not less than three-fourths of a term. This waiver also applies to staff members of certain specifically identified related agencies whose positions are considered equivalent to academic positions of the University.
- Graduate teaching and research assistants of the University on appointment for at least 25 percent but not more than 67 percent of full-time service. Their appointments must require service for not less than three-fourths of the term. Those on appointment for 68 percent or more of full-time service pay tuition at the in-state rate and are eligible for waiver of the Service Fee only. *Caution:* Assistantship appointments are cumulative. For example, if a person holds two appointments, a 25-percent and a 50-percent assistantship appointment, he or she is ineligible for a tuition waiver.
- Students holding academic appointments to the close of the final term of an academic year either as employees or fellows, and for whom tuition and/or the Service Fee have been provided through waiver, are entitled to a waiver of the same kinds of tuition and fees for the summer session or summer term immediately following, provided they hold no appointments during that summer session or term. Students holding summer session or summer term appointments as fellows or as employees are subject to such tuition and fees as would be assessed in accordance with the principles expressed above.
- Nonacademic employees of the University, of any other institutions and agencies under the University Civil Service System, and of certain specifically identified related agencies in status appointments or in appointments designed to qualify for status in an established class (e.g., trainee, intern) for at least 50 percent of full-time services who register in regular University courses not to exceed:
  - Six credit hours or two courses in a semester or quarter if on full-time appointment,
  - Four credit hours if on a 75- to 99-percent time appointment, or
  - Three credit hours if on a 50- to 74-percent time appointment, provided they (1) meet conditions and eligibility for admission as prescribed by the Office of Admissions and Records, (2) are not students as defined in Civil Service Rule 7.7c, and (3) have approval by their employing departments of enrollment and of a makeup schedule to cover any time in course attendance during their regular work schedules. The waiver of tuition also applies to any additional hours of registration by employees that keep them within the same fee assessment credit range. Employees whose total registration is in a higher range than that authorized by their tuition waiver pay only the difference between the waiver authorization and the higher range in which their total registration places them.
- Nonacademic employees in status, learner, trainee, apprentice, or provisional appointments may enroll without payment of tuition in regular courses directly related to their University employment not to exceed 10 credit hours per semester provided they have made application and received prior approval for enrollment as required by procedures issued by the director of nonacademic personnel and set forth in *Policy and Rules—Nonacademic*.

- Holders of tuition waiver scholarships.
- Holders of graduate tuition and fee waivers awarded by the Graduate College.
- Academic staff members emeriti.
- Holders of grants or contracts from outside sponsors that provide payments to cover the total cost of instruction.
- Cooperating teachers and administrators who receive assignment of practice teachers, who receive assignment of students meeting the clinical experience requirement in teacher education curricula, or who cooperate in research projects related to teacher education: one semester, quarter, or summer session for each semester, quarter, or equivalent service rendered within two consecutive semesters. The waiver will apply to the semester, quarter, or summer session of registration, as designated by the student, that is concurrent with, or following, the term of service, but must be applied no later than one calendar year from the end of the term of service. Concurrent registration on more than one campus of the University or in University extramural courses constitutes one semester, quarter, or session of eligibility for waiver. A similar waiver is authorized for cooperating librarians, school-nurse teachers, social welfare field supervisors, developmental child care field supervisors, recreation field supervisors, health-education field supervisors, speech pathology supervisors, educational psychology supervisors, continuing education supervisors, industrial relations field supervisors, and physicians who participate without salary in the instructional program of the University of Illinois College of Medicine at Urbana-Champaign. (Acceptance of more than one assignment from any of the above listed offices during any one term will generate only one waiver.)
- Illinois Teacher of the Year recipients.
- Eligible Illinois senior citizens. (Persons desiring information and/or an application for this waiver should contact the Office of Student Financial Aid, Fourth Floor, Turner Student Services Building, 610 East John Street, Champaign, IL 61820.)

### **Waiver of the Nonresident Portion of Tuition**

Nonresident portion of tuition is waived for:

- All staff members (academic, administrative, or permanent nonacademic) on appointment for at least 25 percent of full-time service with the University or with specifically identified related agencies, provided the appointment requires service for not less than three-fourths of the term.
- The faculties of state-supported institutions of higher education in Illinois holding appointments of at least one-fourth time, provided the appointments require service for not less than three-fourths of the term.
- The teaching and professional staff in the private and public elementary and secondary schools in Illinois (such as counselors, school psychologists, school social workers, librarians, and administrators) who hold such appointments at least one-fourth time, and for not less than three-fourths of the term.
- The spouses and dependent children of all staff members (academic, administrative, or nonacademic) on appointment with the University or certain specifically identified related agencies for at least 25 percent of full-time service, and of those listed in the second item above. (Dependent children are those who qualify as dependents for federal income tax purposes.)
- The spouses and dependent children of fellows and trainees who are employed as teaching assistants to the fullest extent permitted by their fellowship appointments.
- Persons actively serving in one of the armed forces of the United States who are stationed and present in the state of Illinois in connection with that service (and who are enrolled in the University only coincidentally in connection with such stationing and presence) and their spouses and dependent children as long as the military persons remain stationed, present, and living in this state.

### **Service Fee Waivers and Exemptions**

The Service Fee is waived for:

1. Graduate teaching or research assistants holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
2. Foreign exchange students with Service Fee waivers as part of exchange contracts.



3. Holders of Graduate College Service Fee waivers.
4. Law students with Service Fee waivers.
5. Participants in the International Exchange Program in Agriculture.
6. Participants in the Bridge Program.
7. Illinois Teacher of the Year recipients.
8. CIC Scholars.
9. University of Illinois at Chicago students in concurrent enrollment.
10. Department of Children and Family Services dependents.

Exempt from the Service Fee are:

1. Students enrolled in Credit Ranges III or IV.
2. Students registered *in absentia*.
3. Students registered in study-abroad programs.
4. Students registered as participants in the official high school concurrent enrollment program.
5. Participants in the Enrich program.
6. Students registered in recognized off-campus programs.
7. Faculty or academic staff members holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
8. Nonacademic staff members holding at least 50 percent appointments for three-fourths of a term, as defined in the section on tuition.
9. Faculty, academic staff, or nonacademic staff members of specifically identified related agencies.
10. Interinstitutional nonacademic staff members.
11. Cooperating teachers, administrators, or field supervisors, as defined in the section on tuition.
12. Staff members holding combined appointments with the University of Illinois at Chicago.
13. Former University employees with emeritus status.

## General Fee Waivers and Exemptions

The General Fee is waived for:

1. CIC Scholars.
2. University of Illinois at Chicago students in concurrent enrollment.
3. Department of Children and Family Services dependents.
4. Illinois Teacher of the Year recipients.

Exempt from the General Fee are:

1. Faculty or academic staff members holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
2. Nonacademic staff members holding at least 50 percent appointments for three-fourths of a term, as defined in the section on tuition.
3. Faculty, academic staff, or nonacademic staff members of specifically identified related agencies.
4. Interinstitutional nonacademic staff members
5. Cooperating teachers, administrators, or field supervisors, as defined in the section on tuition.
6. Staff members holding combined appointments with the University of Illinois at Chicago.
7. Former University employees with emeritus status.

## Health Service Fee Waivers and Exemptions

The Health Service Fee is waived for:

1. CIC Scholars.
2. University of Illinois at Chicago students in concurrent enrollment.
3. Department of Children and Family Services dependents.
4. Illinois Teacher of the Year recipients.

Exempt from the Health Service Fee are:

1. Students enrolled in Credit Ranges III or IV.
2. Students registered *in absentia*.

3. Students registered in study-abroad programs.
4. Students registered as participants in the official high school concurrent enrollment program.
5. Participants in the Enrich program.
6. Students registered in recognized off-campus programs.
7. Faculty or academic staff members holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
8. Nonacademic staff members holding at least 50 percent appointments for three-fourths of a term, as defined in the section on tuition.
9. Faculty, academic staff, or nonacademic staff members of specifically identified related agencies.
10. Interinstitutional nonacademic staff members.
11. Cooperating teachers, administrators, or field supervisors, as defined in the section on tuition.
12. Staff members holding combined appointments with the University of Illinois at Chicago.
13. Former University employees with emeritus status.
14. University staff members registered as students but eligible for the mandatory State of Illinois Employees Insurance Program.

### **Transportation Fee Waivers and Exemptions**

The Transportation Fee is waived for:

1. CIC Scholars.
2. University of Illinois at Chicago students in concurrent enrollment.
3. Department of Children and Family Services dependents.
4. Illinois Teacher of the Year recipients.

Exempt from the Transportation Fee are:

1. Students enrolled in Credit Ranges III or IV.
2. Students registered *in absentia*.
3. Students registered in study-abroad programs.
4. Students registered as participants in the official high school concurrent enrollment program.
5. Participants in the Enrich program.
6. Students registered in recognized off-campus programs.
7. Faculty or academic staff members holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
8. Nonacademic staff members holding at least 50 percent appointments for three-fourths of a term, as defined in the section on tuition.
9. Faculty, academic staff, or nonacademic staff members of specifically identified related agencies.
10. Interinstitutional nonacademic staff members.
11. Cooperating teachers, administrators, or field supervisors, as defined in the section on tuition.
12. Staff members holding combined appointments with the University of Illinois at Chicago.
13. Former University employees with emeritus status.

### **SEAL, SORF, and SGA Waivers and Exemptions**

The SEAL, SORF, and SGA Fees are waived for:

1. CIC Scholars.
2. University of Illinois at Chicago students in concurrent enrollment.
3. Department of Children and Family Services dependents.
4. Illinois Teacher of the Year recipients.

Exempt from the SEAL, SORF, and SGA Fees are:

1. Students enrolled in Credit Ranges III or IV.
2. Students registered *in absentia*.
3. Students registered in study-abroad programs.
4. Students registered as participants in the official high school concurrent enrollment program.
5. Participants in the Enrich program.



6. Students registered in recognized off-campus programs.
7. Faculty or academic staff members holding at least 25 percent appointments for three-fourths of a term, as defined in the section on tuition.
8. Nonacademic staff members holding at least 50 percent appointments for three-fourths of a term, as defined in the section on tuition.
9. Faculty, academic staff, or nonacademic staff members of specifically identified related agencies.
10. Interinstitutional nonacademic staff members.
11. Cooperating teachers, administrators, or field supervisors, as defined in the section on tuition.
12. Staff members holding combined appointments with the University of Illinois at Chicago.
13. Former University employees with emeritus status.

## Student Health Insurance Fee

Students totally exempt from payment of the Student Health Insurance Fee and therefore not eligible for these benefits and services are:

- Persons registered for doctoral thesis research in absentia.
- Persons registered in off-campus courses and study abroad courses for zero credit. (If registered for more than zero credit, they are required to pay this fee.)
- University employees registered at the request of their departments in zero credit courses especially established to improve their work.
- Staff members who are registered as students but who are eligible for and participate in the mandatory State of Illinois Employees Insurance Program.
- Staff members of certain specifically identified related agencies who are eligible automatically to receive hospital-medical coverage as an employment benefit at the cost of the employing agency.
- Students presenting petitions and evidence of approved equivalent medical insurance coverage (See Student Health Insurance.)
- Illinois Teacher of the Year recipients.
- CIC Visiting Scholars and concurrent University of Illinois registrants.

## STUDENT HEALTH INSURANCE

The University Board of Trustees requires all students to be covered by health insurance through either a program provided by the University or one determined to be equivalent to that offered by the University.

The Student Insurance Office is permanently located at 505 East Green Street, Room 228, Champaign. For the periods during which on-campus registration is held, the insurance office is located in the Armory. When the Post-Registration Service Center is open, an insurance station is operated in the Illini Union for the first (fall) and second (spring) semesters, and in the Henry Administration Building for the summer session. During the times either the Armory or the Service Center station is open, all exemptions, reinstatements, and applications for coverage must be made at that location. Students should consult the current *Timetable* for the dates and times of on-campus registration and operation of the post-registration service activities.

Students registered in University classes for residence work are assessed a fee each registration to cover the cost of the program. A student presenting evidence of equivalent medical insurance coverage (a copy of the insurance policy or a schedule of benefits) may be exempted from payment of this fee upon approval of a petition submitted IN PERSON at one of the Insurance Office locations by no later than the final date established each term for a refund of tuition and fees. A signed waiver and assumption of responsibility is also required. Once approved, the exemption is continuous, and it is the student's responsibility to request reinstatement if coverage is desired. Reinstatements may be requested at any time up to the last day of coverage for a semester or term, but are subject to approval of a statement of medical history; there is no prorated premium.

- First (fall) semester coverage extends through the first day of on-campus registration for the second (spring) semester.
- Second (spring) semester coverage extends through the first day of on-campus registration for the summer session.
- Summer session coverage extends through the first day of on-campus registration for the first (fall) semester.

Premium rates for each semester or term may be found in the respective *Timetable*.

Married students may purchase student health insurance to cover spouses and dependent children upon application and payment of an additional premium at one of the Student Insurance Office locations within the first ten days of instruction of a semester or the first seven days of instruction in a summer session. Application and premium payments must be made for each semester or term. Premiums for spouses and children may not be charged to student accounts.

Petitions for exemption or reinstatement, and applications for dependent or extension of coverage must be submitted IN PERSON. Items mailed to the Student Insurance Office or included with payments made by mail will be returned to the sender without action; such items must be resubmitted by the student in person within the stated deadline for the term in question.



**Table 4: Undergraduate Tuition and Fees for Fall Semester 1990**

SEMESTER	FULL PROGRAM		PARTIAL PROGRAMS				
	RANGE I 12 semester hours and above or 3 units and above		RANGE II Above 5, but less than 12 semester hours or above 1.25, but less than 3 units		RANGE III Above 0 through 5 semester hours or above 0 through 1.25 units		RANGE IV Zero credit only
<b>Undergraduate</b> (Freshmen and sophomores)	Illinois resident	Non- resident	Illinois resident	Non- resident	Illinois resident	Non- resident	Resident and nonresident
Tuition	\$1,065	\$2,835	\$ 720	\$1,910	\$ 375	\$ 985	\$ 188
Fees (All students)	369	369	369	369	115	115	115
[Service Fee	124	124	124	124	0	0	0]
[Health Service Fee	106	106	106	106	0	0	0]
[Health Ins. Fee	66	66	66	66	66	66	66]
[General Fee	49	49	49	49	49	49	49]
[Transportation Fee	13	13	13	13	0	0	0]
[SEAL, SORF, SGA	11	11	11	11	11	11	0]
Total	\$1,434	\$3,204	\$1,089	\$2,279	\$ 490	\$1,100	\$ 303
<b>Undergraduate</b> (Juniors, seniors, and nondegree)							
Tuition	\$1,188	\$3,201	\$ 802	\$2,156	\$ 416	\$1,108	\$ 208
Fees	369	369	369	369	115	115	115
Total	\$1,557	\$3,570	\$1,171	\$2,525	\$ 531	\$1,223	\$ 323

  

1991 EIGHT-WEEK SUMMER SESSION	FULL PROGRAM		PARTIAL PROGRAMS				
(Subject to change)	RANGE I 6 semester hours and above or 1.5 units and above		RANGE II Above 2.5, but less than 6 semester hours or above .625, but less than 1.5 units		RANGE III Above 0 through 2.5 semester hours or above 0 through .625 units		RANGE IV Zero credit only
<b>Undergraduate</b> (Freshmen and sophomores)	Illinois resident	Non- resident	Illinois resident	Non- resident	Illinois resident	Non- resident	Resident and non resident
Tuition	\$ 533	\$1,418	\$ 360	\$ 955	\$ 188	\$ 493	\$ 94
Fees	294	294	294	294	115	115	115
Total	\$ 827	\$1,712	\$ 654	\$1,249	\$ 303	\$ 608	\$ 209
<b>Undergraduate</b> (Juniors, seniors, and nondegree)							
Tuition	\$ 594	\$1,602	\$ 401	\$1,078	\$ 208	\$ 554	\$ 104
Fees	294	294	294	294	115	115	115
Total	\$ 888	\$1,896	\$ 695	\$1,372	\$ 323	\$ 669	\$ 219

Complete information about tuition and fees for any term is available from the Registration Services Office, Window 25, 100 Henry Administration Building, (217) 333-0210.

## Financial Aid

The Application Process .....	60
Sources of Financial Assistance .....	61
Employment: A Form of Self-Help Financial Aid .....	62
Student Loans: Another Form of Self-Help Assistance .....	62
Specialized Aid Programs .....	64
For More Information on Scholarship Programs .....	66
Student Emergency Loans .....	66

Financial aid programs are designed to provide assistance to students who otherwise would not be able to pursue a postsecondary education. A basic principle of most aid programs is that parents and students pay for an education according to their capabilities. Student financial aid programs, therefore, are designed to supplement—not replace—a family's contribution.

Even with relatively low tuition and fee charges, the cost of a college education still can be a financial burden for many families. (Estimated expenses for an undergraduate student at the University appear in Table 4 on page 59.)

No student, however, should fail to apply for admission because his or her family feels that it is unable to pay the full cost of a college education. The Office of Student Financial Aid at the University of Illinois at Urbana-Champaign (Fourth Floor, Turner Student Services Building, 610 East John Street, Champaign, IL 61820) administers several financial aid programs. If the family's resources are determined to be insufficient to meet necessary educational expenses, financial aid in the form of loans, employment, grants, and/or scholarships usually can be made available.

The major sources of aid are federal and state government programs, as well as funds administered by the University. There also are funds for which a student applies directly to an awarding agency.

Personnel in the Office of Student Financial Aid are available to those needing information on financial assistance. Office hours are from 9:00 a.m. to 5:00 p.m. Monday through Friday, except on all-campus holidays, telephone (217) 333-0100.

### THE APPLICATION PROCESS

Follow the steps below to apply for federal, state, and University aid.

**NOTE:** Students in veterinary medicine who do not have a bachelor's degree should follow these steps prescribed for undergraduate students.

- Complete a need analysis document. The Family Financial Statement published by American College Testing or the Financial Aid Form published by the College Scholarship Service is preferred.
- Apply for an Illinois Student Assistance Commission Monetary Award (Illinois residents only) and a Pell Grant<sup>1</sup> by releasing application information to the U.S. Department of Education, the Illinois Student Assistance Commission (ISAC), and the University.

---

<sup>1</sup>All Pell Grant applicants receive a Student Aid Report that indicates whether or not they are eligible for an award. All copies of this report must be submitted to the Office of Student Financial Aid.

### Transfer and Readmitted Students

In addition to completing a need analysis document, transfer students and students who have been readmitted to the University who wish to apply for financial aid must provide financial aid transcripts for all institutions they have attended. Even students who have not received aid previously must provide this information before being considered for future assistance. Transcript forms can be obtained from the Office of Student Financial Aid.

### How to Obtain Need Analysis Documents

Need analysis documents are available from high school and community college counselors and the Office of Student Financial Aid. The Family Financial Statement, additional financial



aid information, and an optional Supplemental Scholarship Information Form are in application packets available from the Office of Student Financial Aid. Students also may call the office at (217) 333-0100 and request documents via a recorded telephone message.

## Application Dates

Students seeking financial assistance through the University are encouraged to apply early. When forms become available, they should be submitted for the next academic year as soon after January 1 as possible.

The preferential filing date for first priority processing and equal consideration of financial aid applications is mid-March prior to the academic year for which aid is desired. Applications completed after mid-March will be considered according to the availability of funds.

## SOURCES OF FINANCIAL ASSISTANCE

Several types of financial aid are available. Since the University's funds are limited, students also should seek assistance provided by national, state, and local organizations.

### Scholarships

Most scholarships require high scholastic achievement, but financial need is an additional criterion. Recipients of need-based scholarships are determined from information supplied on need analysis documents and the optional Supplemental Scholarship Information Forms.

The Merit Recognition Scholarship (MRS) administered by the Illinois Student Assistance Commission (ISAC) is awarded solely on the basis of scholastic achievement. The \$1,000 award is for entering freshmen who graduated in the top 5 percent of an Illinois high school class. Recipients must attend an Illinois postsecondary institution. The program is dependent upon annual funding by the state. Potential recipients are notified by the ISAC.

The Paul Douglas Scholarship, another program not based on need and administered by the Illinois Student Assistance Commission, is for students in teacher education curricula. While amounts vary, a typical award for students attending the University of Illinois at Urbana-Champaign is \$5,000. Recipients must have graduated in the top 10 percent of their high school classes.

In addition to scholarships administered by the Office of Student Financial Aid and the ISAC, numerous agencies, organizations, and businesses provide funds to students in specific curricula. These outside agencies, organizations, and businesses often contact individual departments or units for nominations of potentially eligible recipients. For further information, students may wish to contact the departments in which they are enrolled or have been accepted for admission.

### Federal and State Grant Programs

#### PELL GRANT

A major source of financial assistance for undergraduate students is the federally funded Pell Grant program. For academic year 1991-92, awards ranged from \$200 to \$2,400.

As indicated in The Application Process (see page 60), undergraduate aid applicants must submit all parts of their Pell Grant Student Aid Reports to complete their aid application files. While Pell Grant eligibility does not determine eligibility for other financial aid, students must demonstrate that they have applied for this federal program before receiving assistance from the University's more limited resources.

#### ILLINOIS STUDENT ASSISTANCE COMMISSION (ISAC) MONETARY AWARD

The Illinois Student Assistance Commission Monetary Award is another major source of grant assistance to undergraduate Illinois residents attending colleges and universities in the state. Ranging from \$300 to the full amount of tuition and fee charges at public institutions, this award is granted on the basis of demonstrated financial need.

**NOTE:** The Illinois Student Assistance Commission also administers a State Scholar Program that recognizes scholastic achievement. It is not necessary for a student to be named a State Scholar to be eligible for a monetary award, nor does receiving such recognition guarantee eligibility for a monetary award.

## Grants Awarded by the Office of Student Financial Aid

Awards from other federal and state grant programs are made by the Office of Student Financial Aid. Students do not apply specifically for these grants; anyone filing a need analysis document is considered. (See The Application Process, page 60.)

The *Supplemental Educational Opportunity Grant* is a federally funded grant program distinct from the Pell Grant (above). The federal government annually provides postsecondary institutions with allocations from which awards are made. At UIUC during 1990-91, awards ranged from \$200 to \$2,000.

*Students for Equal Access to Learning (SEAL)* and *Student-to-Student Matching (STSM)* grant programs are funded by voluntary student contributions and matching funds provided by the state through the Illinois Student Assistance Commission. Students at Urbana-Champaign initiated the SEAL program by referendum in 1970 and have reaffirmed it every four years since. STSM grants are awarded in accordance with rules prescribed by the Illinois Student Assistance Commission. During academic year 1990-91, awards ranged from \$100 to \$1,000.

## EMPLOYMENT: A FORM OF SELF-HELP FINANCIAL AID

The Office of Student Financial Aid offers employment assistance to any University student seeking part-time work. Office hours are 9:00 a.m. to 5:00 p.m., Monday through Friday, except on all-campus holidays.

The University of Illinois at Urbana-Champaign employs more than 5,000 part-time student workers in offices, libraries, laboratories, farms, and food service units; each year these student employees earn more than \$9 million. In addition, many students work in the community.

Hourly wages for student workers vary according to the type of work and responsibilities involved, but equal at least the minimum wage (\$4.25 as of April 1991). Most jobs require from ten to fifteen hours of work per week. Earnings can approximate 20 percent of a student's college expenses.

Many students find food service work or temporary odd jobs before or after regular University hours. By arranging class schedules to have consecutive hours free each day for working, students may improve their employment opportunities. Job opportunities requiring advanced skills or knowledge offer excellent part-time, career-related experience to University students.

## College Work-Study

The University of Illinois participates in College Work-Study, a federal financial aid program that helps colleges and universities provide additional jobs for students. To participate in the program, a student must have applied for need-based aid and have a College Work-Study award as part of a financial aid package from the Office of Student Financial Aid.

A College Work-Study award recipient must check with the Office of Student Financial Aid to obtain assistance in job placement. This should be done at the beginning of the academic term.

## STUDENT LOANS: ANOTHER FORM OF SELF-HELP ASSISTANCE

### Low-Interest Loans Awarded by the University

The Office of Student Financial Aid offers loans to students who demonstrate financial need. All on-time applicants for University aid are considered for low-interest loans from the University. The Office of Student Financial Aid, acting for the University of Illinois as lender, determines who is eligible for, and the amount of, a long-term loan.

These loans normally carry an interest rate of 5 percent, and repayment is deferred until six months after the borrower ceases to be at least a half-time student.

The University of Illinois also awards the federally funded Perkins Loan to students. These loans carry a 5 percent interest rate, and payment is deferred until either six or nine months after the borrower ceases to be a full-time student. Health Professions Student Loans, available to veterinary medicine students, carry a 5 percent interest rate with repayment beginning 12 months after the borrower leaves school.

### Stafford Student Loan Program

For students who attend college at least half time and who demonstrate financial need, the federal government has encouraged state governments to operate need-based, guaranteed



long-term loan programs in conjunction with commercial lenders. Lenders receive an interest subsidy, which the federal government pays until the borrower must begin to repay the loan. In addition, the government pays a supplemental subsidy to match the prevailing interest rate of conventional loans.

More information is available from lending institutions and the Office of Student Financial Aid.

## General Terms of Long-Term Loan Programs

Students who contemplate borrowing money for educational purposes should consider carefully the general terms and repayment requirements of the loan programs listed below. For specific terms pertaining to any loan, a borrower always should read the conditions that appear on the promissory note and question any provisions that seem unclear.

**NOTE:** The interest rates and minimum repayment amounts for all loan programs indicated below were the prevailing figures at the time of publication. When obtaining any loan, a borrower should be aware of the interest being charged and the repayment requirements at the time of signing a promissory note.

### PERKINS LOAN

*Aggregate maximum:* \$9,000 for undergraduates.

*Interest rate:* 5 percent per year simple interest on the unpaid principal balance; begins when first repayment is due.

*Forgiveness:* In some cases; contact the Student Loan Collections Office, 125 Henry Administration Building, 506 South Wright Street, Urbana, IL 61801.

*Begin repayment:* Nine or six months after ceasing to be a half-time student.

*Deferments:* Up to three years for service in the armed forces, Peace Corps, or VISTA, or return to full-time student status; contact the Student Loan Office for other possible deferment categories.

*Minimum repayment:* \$30 plus interest per month or amount needed to repay principal and interest in ten years.

### UNIVERSITY OF ILLINOIS LONG-TERM LOAN

*Aggregate maximum:* \$6,000 for undergraduates.

*Interest rate:* 5 percent per year simple interest on the unpaid principal balance, with some exceptions; begins when first repayment is due.

*Forgiveness:* None; cosigner required.

*Begin repayment:* Six months after ceasing to be at least a half-time student.

*Deferments:* By arrangement with the Student Loan Office, 125 Henry Administration Building, 506 South Wright Street, Urbana IL 61801.

*Minimum repayment:* \$30 plus interest per month or amount needed to repay principal and interest in ten years.

### STAFFORD STUDENT LOANS

Illinois Guaranteed Loan; United Student Aid Fund Loan; other state-guaranteed loan programs.

*Aggregate maximum:* Ranges from \$17,250 for undergraduate students to \$54,750 for graduate students including amount borrowed for undergraduate work.

*Interest rate:* 8 or 9 percent per year simple interest on the unpaid principal balance; begins when first repayment is due; rate is currently 8 percent for students who have not borrowed previously (increases to 10 percent during the fifth year of repayment).

*Forgiveness:* None.

*Begin repayment:* Varies; usually six months after ceasing to be at least a half-time student.

*Minimum repayment:* Varies; usually \$50 per month plus interest or amount required to repay principal and interest in ten years.

### SUPPLEMENTAL LOANS TO STUDENTS AND PARENTS

Three other loan programs are available directly from lending institutions such as banks, savings and loan associations, and credit unions.

Through the PLUS program, parents or legal guardians may borrow as much as \$4,000 per academic year for each dependent student. The maximum aggregate that can be borrowed for each student is \$20,000. Interest varies and begins to accrue as soon as the loan is obtained, with repayment beginning within 60 days.

For independent students, the Supplemental Loan for Students is available. As much as

\$4,000 per academic level may be borrowed up to an aggregate of \$20,000, which includes any Stafford Student Loans.

Interest begins to accrue as soon as the loan is obtained and is payable during the deferment period, but student borrowers may have repayments on the principal deferred until 30 days after they leave school permanently.

The Illinois Opportunity Loan Program, available for the first time in academic year 1990-91, was established to help students from middle income families. Students must first apply for need-based aid; however, financial need is not a requirement for loan eligibility. Recipients must be at the sophomore level or above. Maximum annual amounts, which include Stafford Student Loans, are for sophomores: \$2,625; for juniors and seniors: \$4,000. Since funds are limited, loan availability is based upon the date of application.

More information, including repayment provisions and schedules, is available from lending institutions.

## **Approximate Monthly Payments Required by Loan Programs**

Monthly repayment schedules under various loan programs are somewhat comparable; variations occur depending upon the length of time allowed to repay the entire loan amount and the interest charged. The monthly payments given below are approximations to help potential borrowers estimate the financial obligations they will incur should they participate in any of these loan programs.

### **PERKINS LOANS; UNIVERSITY OF ILLINOIS LONG-TERM LOANS**

A borrower has as long as ten years to repay either of these loans, with a minimum monthly repayment of \$30 plus 5 percent per year simple interest. A student borrowing \$5,000 and taking the full 120 months to repay the loan would make monthly payments of \$42 plus interest. Since interest is charged only on the unpaid balance, the first payment of \$62.83 (including principal and interest) would be the highest amount scheduled to be charged in any month.

### **STAFFORD STUDENT LOAN**

This loan program currently carries a simple interest rate of 8 percent per year, but students who have previously borrowed guaranteed loans may pay 7 or 9 percent interest. During the fifth year of repayment, interest on the unpaid balance is 10 percent. A student borrowing \$5,000 and taking sixty months to repay a Stafford Loan would make monthly payments of \$103 including interest; a student borrowing \$10,000 and paying over a sixty-month period would repay at \$207 per month including interest.

## **Loan Repayment: Whose Responsibility?**

Any recipient of a student loan must recognize that such a loan is a debt incurred by the student, not the parents (except for PLUS loans to parents). The responsibility for understanding the conditions and regulations of the loan process, as well as the repayment schedule, rests with the student borrower. Additional information on the Perkins Loan program or the University of Illinois Long-Term Loan program as well as loan indebtedness is available in the Office of Student Financial Aid. Additional information on guaranteed loan programs is available from lending institutions and the Office of Student Financial Aid.

## **SPECIALIZED AID PROGRAMS**

Although most financial aid award guidelines for Urbana-Champaign students are determined by the Office of Student Financial Aid, some aid programs are administered by groups or agencies to which the student applies directly (besides the two major grant programs described earlier: Pell Grant and Illinois Student Assistance Commission Monetary Award).

### **Programs for Veterans**

#### **ILLINOIS VETERANS GRANTS**

An Illinois statute provides a grant for each veteran who has served honorably in the armed forces of the United States, provided that certain eligibility requirements are met. The grant covers the cost of resident tuition and most fees. The veteran must have been honorably discharged or separated from such service or received a discharge for medical reasons directly connected with active service.

Members currently serving in the armed forces also are entitled to an Illinois Veterans Grant provided they have served at least one year and would be qualified for the grant if discharged.



Contact the Illinois Student Assistance Commission for an application and information on additional requirements.

### **OTHER VETERANS' EDUCATIONAL BENEFITS**

Students seeking information regarding veterans' educational benefits should contact the Veterans Affairs staff in the Office of Student Financial Aid.

## **Other Specialized Scholarship and Grant Programs**

### **ATHLETIC GRANTS-IN-AID**

Certain fields of athletic activity have been approved for grants-in-aid. These include baseball, basketball, cross country, football, golf, gymnastics, swimming, tennis, track and field, and volleyball. Application should be made to the Director of Athletics, University of Illinois at Urbana-Champaign, 112 Assembly Hall, 1802 South First Street, Champaign, IL 61820.

### **FRED S. BAILEY SCHOLARSHIPS**

These scholarships are for men and women students in any program of study who demonstrate superior academic achievement and character as well as financial need. Awards vary from \$200 to \$800 annually.

Apply by contacting the University Young Men's Christian Association, 1001 South Wright Street, Champaign, IL 61820.

### **AVERY BRUNDAGE SCHOLARSHIPS**

Avery Brundage, who was honorary president of the International Olympic Committee and an alumnus of the University of Illinois, established this fund to recognize and assist University of Illinois students who are both academically gifted and exceptional amateur athletes.

Awards can vary from year to year and are renewable. For each 1990-91 recipient, awards were \$1,300. Selection is made on the basis of scholastic records, participation in amateur athletics, and personal recommendations. Application materials are available from the Office of Student Financial Aid by mid-November and must be submitted by the end of January for the next academic year.

### **ILLINOIS DEPARTMENT OF CHILDREN AND FAMILY SERVICES ASSISTANCE**

The department will cover the cost of resident tuition and fees for four years and will provide maintenance and payment of school expenses to supplement the student's earnings and other resources.

Recipients must be under the guardianship of the Illinois Department of Children and Family Services. For an application and additional information, contact a local caseworker or the Illinois Department of Children and Family Services, One North Old State Capitol Plaza, Springfield, IL 62706, or 100 West Randolph Street, 6th Floor, Chicago, IL 60601.

### **ILLINOIS DEPARTMENT OF REHABILITATION SERVICES**

This assistance varies according to individual needs and program requirements. A recipient must have a disability that is a handicap to employment. To apply, Illinois residents should contact the State of Illinois Department of Vocational Rehabilitation, 1207 South Oak Street, Room 102, Champaign, IL 61820. Students from other states should contact their state Department of Rehabilitation Services.

## **Tuition Scholarships**

### **CHILDREN OF VETERANS SCHOLARSHIPS**

The University of Illinois may award three scholarships per year in each Illinois county: one to a child of a veteran of World War II; one to a child of a veteran who served at any time during the Korean conflict between June 25, 1950, and January 31, 1955; and one to a child of a veteran who served at any time during the Vietnam conflict between January 1, 1961, and May 7, 1975. The candidate and veteran parent must be residents of Illinois and of the county where the application is made. Scholarships are awarded on the basis of ACT scores with preference given to candidates whose veteran parent is deceased or disabled. Applications are available from the Office of Student Financial Aid or from superintendents of educational service regions from October 15 through March 15 for the next academic year.

### **GENERAL ASSEMBLY SCHOLARSHIPS**

Each member of the Illinois General Assembly may award one to four scholarships each year. A recipient must reside in the district represented by the nominating legislator. Applications and information on additional requirements are available from state senators and representatives.

### **ILLINOIS NATIONAL GUARD/NAVAL MILITIA SCHOLARSHIPS**

These scholarships provide tuition assistance for those who are currently enlisted in the guard or militia and who have completed at least one year of service. Applications are available from any National Guard armory or Naval Militia unit, the Office of Student Financial Aid, and the Illinois Student Assistance Commission, 106 Wilmot Road, Deerfield, IL 60015.

### **ILLINOIS RESERVE OFFICERS' TRAINING CORPS (ROTC) SCHOLARSHIPS**

A recipient of this tuition waiver scholarship must be an Illinois resident and enrolled in a university or college Army, Navy, or Air Force ROTC. Students may apply after a minimum of one semester of ROTC. If awarded, scholarships may be retroactive to the beginning of the school year. Application forms are available at each ROTC unit. (See also the Army, Navy, and Air Force Reserve Officers' Training Corps sections in this catalog for federal scholarship opportunities.)

### **MIA-POW DEPENDENTS GRANT**

This grant is for a child or spouse of an Illinois resident declared a prisoner of war, missing in action, killed, or 100 percent disabled. For more information and an application, contact the Illinois Student Assistance Commission.

### **POLICE/FIRE PERSONNEL DEPENDENTS ASSISTANCE**

Payment of tuition and mandatory fees is available to children (age 25 or younger) of Illinois police or fire personnel killed in the line of duty. For more information and an application, contact the Illinois Student Assistance Commission.

### **CORRECTIONAL WORKERS DEPENDENTS ASSISTANCE**

Awards of varying amounts are available to dependents, including spouses, of correctional workers who were killed or 90 percent permanently disabled in the line of duty since July 1, 1960. For more information and an application, contact the Illinois Student Assistance Commission.

### **SPECIAL TEACHER EDUCATION ASSISTANCE**

This program provides a waiver of resident tuition, but not fees, for four calendar years. A candidate must be a recent graduate of an Illinois high school in the upper half of his or her graduating class or must hold a valid Illinois Teacher's Certificate. A recipient must teach in a special education program in a recognized public, private, or parochial school in Illinois for at least two of the five years immediately after graduation from the University. Further information and applications are available from superintendents of educational service regions.

## **FOR MORE INFORMATION ON SCHOLARSHIP PROGRAMS**

Many scholarship programs operate independently of any college or university, and recipients usually are free to attend schools of their choice.

Each year, University of Illinois at Urbana-Champaign undergraduates receive more than \$4 million in such awards. Several books available in community and school libraries contain information about these other resources. A *Financial Aid Bibliotheca* listing many of these printed materials is published by the Urbana-Champaign Office of Student Financial Aid. Copies of the *Bibliotheca* are available upon request.

## **STUDENT EMERGENCY LOANS**

To meet expenses in emergencies, undergraduates may borrow as much as \$200 for approximately thirty days or until the last day of instruction for the semester, whichever comes first. In order to make more money available to a maximum number of students, applicants should borrow as little as is necessary for as short a period of time as possible. A service fee of \$3 is charged. The interest charge on overdue loans is 18 percent per year on the unpaid balance.

Students who are U.S. citizens should apply in person to the Office of Student Financial Aid, Fourth Floor, Turner Student Services Building. International students (noncitizens who are not in the United States as permanent residents) should contact the Office of International Student Affairs, 510 East Daniel Street, Champaign, IL 61820 for information.



# Grading System and Other Regulations

Grading System ..... 67

Classification of Students ..... 69

Transcripts of Academic Records ..... 69

Student Records Policy ..... 69

Falsification of Documents ..... 70

Identification Cards ..... 70

Students in Debt to the University ..... 71

Automobiles, Motorcycles, Motor Scooters, Motor-driven Bicycles, and Bicycles ..... 71

Academic, administrative, and conduct regulations are published in the *Code on Campus Affairs and Handbook of Policies and Regulations Applying to All Students*. Students are responsible for complying with these regulations of the University and those of the colleges and departments from which they take courses. This publication is available to students in the lobby of the Turner Student Services Building, in 177 Henry Administration Building, and at the Information Desk in the Illini Union. A copy may also be obtained by writing to the Office of Admissions and Records.

## GRADING SYSTEM

Faculty members have the responsibility to provide the University with an individual evaluation of the work of each student in their classes. Final course grades are entered on the student’s permanent University record at the close of each semester, term, or session. The University of Illinois at Urbana-Champaign uses the following grading system: A = excellent; B = good; C = fair; D = poor (lowest passing grade); E = failure, including courses dropped for academic irregularities; Ab = absent from the final examination without an acceptable excuse (counts as a failure). If a student is absent from a final examination and it is clear that taking the examination could not have resulted in a passing grade for the course, a grade of E may be given instead of Ab. In addition to the above grades, instructors in the College of Law are authorized to assign grades of B+ and C+.

## Computation of Scholastic Averages

For numerical computation of scholastic averages, the following values are designated: A = 5.0; B+ = 4.5; B = 4.0; C+ = 3.5; C = 3.0; D = 2.0; E and Ab = 1.0.

## Uniform Method for Calculation

A uniform method for calculating undergraduate grade-point averages has been established for all undergraduate colleges on the Urbana-Champaign campus. These averages are calculated on the basis of all courses attempted for which grades and credits are assigned and that carry credit in accordance with the *Courses* catalog. Since courses offered by the religious foundations on or near the Urbana-Champaign campus are not official University courses and are not included in the *Courses* catalog, the grades earned in such courses will not be included in the calculation of any grade-point averages. Grades of S, U, CR, NC, and Pass (see next section on Other Symbols in Use) are reported on official University transcripts but are not included in grade-point averages since grade-points are not assigned to these letter grades. This method of calculation is used to determine honors, probation and drop status, financial aid and scholastic awards, and transfer between colleges on this campus.

For the purpose of computing a grade-point average for graduation, only the grades received in those courses counting toward the degree, including grades in repeated courses, are included in the average. (See Grade-Point Requirements for the Bachelor’s Degree on page 74.)

For the special method used to determine eligibility for transfer into the University, refer to the transfer admission policy on page 18.

## Other Symbols in Use (not included in computation of averages)

- W — Approved withdrawal without credit.
- EX — Temporarily excused. Approved extension of time to complete the final examination or other requirements of the course. Applies to *both* undergraduate and graduate students. Entitles the student to an examination later without fee, or additional time to complete other requirements of the course. (Only the dean of the student's college may authorize such an extension of time in an individual case. A grade of EX that is not removed by the end of the first eight weeks of instruction in the next semester in which the student is enrolled in an undergraduate college on the Urbana-Champaign campus automatically becomes a grade of E. If the student receiving an excused grade does not reenroll on the Urbana-Champaign campus, the excused grade, if not removed, becomes an E after one calendar year.)
- CR — Credit earned. To be used only in courses taken under the credit-no credit grading option. (Instructors report the usual letter grades. Grades of A, B, and C will automatically be converted to CR.)
- NC — No credit earned. To be used only in courses taken under the credit-no credit grading option. (Instructors report the usual letter grades. Grades of D, E, and Ab will automatically be converted to NC.)
- IP — Course in progress.
- Miss — Missing grade. Instructor has failed to submit a grade for the student.
- DF — Grade temporarily deferred. To be used only in those thesis, research, and special problems courses extending over more than one semester that are taken by graduate students as preparation for the thesis and by undergraduate students in satisfaction of the requirements for graduation with honors, and in other approved courses that extend over more than one semester. (Requests for use of the DF grade in courses that extend over more than one semester, and therefore require postponement of the final grade report, must be submitted in writing by the executive officer of the department offering the courses to the dean of the appropriate college for concurrence. A current list of courses that have received such approval is maintained in the Office of Admissions and Records.)
- S — Satisfactory, and
- U — Unsatisfactory. To be used only as final grades in graduate thesis research courses, in graduate and undergraduate courses given for zero credit, and in other courses that have been specifically approved by the head or the chairperson of the department concerned, with concurrence of the appropriate college dean. A current list of courses that have received such approval is maintained in the Office of Admissions and Records.
- Pass — To be used only in courses passed by special or proficiency examinations. A minimum grade of C is required to pass.

## Credit-No Credit Grading Option

The credit-no credit grading option is designed to encourage students to explore areas of academic interest that they might otherwise avoid for fear of poor grades. All students considering this option are cautioned that many graduate and professional schools consider applicants whose transcripts bear a significant number of nongrade symbols less favorably than those whose transcripts contain none or very few. Likewise, in computing a preadmission grade-point average, some of these schools may convert the NC symbol into a failing grade since they do not know whether the actual grade was a D, E, or Ab.

A full-time undergraduate student in good academic standing (not on probation) may, with the approval of his or her adviser, take a maximum of two courses each semester under the credit-no credit grading option. Part-time students may take one course each semester under this option. Summer session students may take one course under the credit-no credit option.

A maximum of 18 semester hours earned under the credit-no credit grading option may be applied toward a baccalaureate degree at the Urbana-Champaign campus of the University. A correspondence course taken on a credit-no credit basis will be included in the 18-semester-hour credit-no credit limit.

Any lower- or upper-division course may be chosen under the credit-no credit option except courses used to satisfy the University's general education requirements, courses designated by name or area by the major department for satisfying the major, and those specifically required



by name by the college for graduation. In cases of subsequent change of major, courses previously taken under the credit-no credit option in the new field may qualify for meeting major requirements.

Undergraduate students must exercise the credit-no credit option for a course taken in residence only during on-campus registration, within the first eight weeks of instruction in a semester, during the first four weeks of an eight-week course taught in a fall or spring semester, or during registration or within the first four weeks of instruction during the summer session. Students may elect to return to the regular grade option by filing an amended request within the first eight weeks of instruction in a semester, within the first four weeks of instruction in an eight-week course taught during a semester, or within the first four weeks of instruction during the summer session. The credit-no credit option form must be properly approved and deposited in the college office.

Instructors are not informed of those students in their classes who are taking work under the credit-no credit option, and they report the usual letter grades at the end of the course. These grades are automatically converted to CR or NC. Grades of C or better are required in order to earn credit. Credit-no credit courses are not counted toward the grade-point average but are included as part of the total credit hours. Final grades of CR or NC (for credit or no credit) are recorded on the student's permanent academic record and subsequently will not be changed to letter grades.

**CLASSIFICATION OF STUDENTS**

Classification of an undergraduate student is made by the Office of Admissions and Records based upon the number of credit hours earned, which includes credit earned by examination or accepted for transfer by the University whether or not such credit is applicable to a student's degree program. Classification for registration, certification, and assessment purposes is based on the following scale.

Freshman standing	0-29.9 hours
Sophomore standing	30-59.9 hours
Junior standing	60-89.9 hours
Senior standing	90 or more hours

**TRANSCRIPTS OF ACADEMIC RECORDS**

Former and currently enrolled students who have paid their University charges are entitled to receive, upon written request, transcripts of their academic records. Upon graduation or withdrawal from the University, any student with an outstanding loan is not issued a transcript until he or she has completed an exit interview with the Office of Student Accounts and Cashiering. Each transcript includes a student's entire academic record to date and current academic status. Partial transcripts are not issued.

The charge for transcripts is \$2 per copy (amount subject to change). For written certification of attendance, degrees, or other data, the charge is \$2 per copy (amount subject to change). For same-day service, available only if requested in person, the charge is \$5 (amount subject to change) for the first transcript or certification and the regular fee for extra copies ordered at the same time.

No charge is made if the request for a transcript is accompanied by a Teacher's Certification form. A student who submits an application for direct transfer admission to the University of Illinois at Chicago through the Urbana admissions office, 177 Henry Administration Building, will have a transcript included with it at no charge.

Telephone requests for transcripts cannot be honored. Transcripts are released only by written request to whomever students or former students designate. A written request accompanied by a check or money order made payable to the University of Illinois should be sent to the Office of Admissions and Records (see the inside back cover for address information).

**STUDENT RECORDS POLICY**

It is University policy to comply fully with the Family Educational Rights and Privacy Act of 1974 as amended. Guidelines and regulations for discharge of the University's obligation under this act are contained in the *Code on Campus Affairs and Handbook of Policies and Regulations*

*Applying to All Students*, available to students at 177 Henry Administration Building and by request from the Office of Admissions and Records.

Under these guidelines:

- Students have the right to inspect their educational records.
- Certain student records may be released only with the prior consent of the student.
- Certain student records can be released with or without the student's consent.
- Under certain conditions, parents may be granted access to a student's record with or without the student's consent.
- Procedures exist for students to challenge the contents of their educational records.
- The University may release without the student's consent information that appears in student directories and publications that are available to the public except when requested by a student to suppress this information. Forms for suppressing this information are available during on-campus registration and at the Post-Registration Service Center in the Illini Union. They must be completed within the first five days of classes in a semester or summer session. Each request will be in force until the first day of classes of the following semester.

For currently enrolled students, directory information includes the student's name; addresses; telephone numbers; college, curriculum, and major field of study; class level; date of birth; dates of attendance and full- or part-time status; eligibility for membership in registered University honoraries; degrees, honors, and certificates received or anticipated; weight and height for athletic team members; participation in officially recognized activities and sports; and institutions previously attended.

For former students, directory information includes the student's name; date of birth; last known addresses and telephone numbers; college, curriculum, and major field of study; dates of attendance and full- or part-time status; class level; honors; certificates or degrees earned at the University and the date(s) conferred; weight and height for athletic team members; participation in officially recognized activities and sports; and institutions previously attended.

## **FALSIFICATION OF DOCUMENTS**

Any student who, for purposes of fraud or misrepresentation, falsifies, forges, defaces, alters, or mutilates in any manner any official University document or representation thereof may be subject to discipline. Some examples of official documents are identification cards, program request forms, receipts, transcripts of credits, library documents, and petitions for change in residence status.

Any applicant who knowingly withholds information or gives false information on an application for admission or readmission may become ineligible for admission to the University or may be subject to discipline.

Any student who knowingly withholds information or gives false information in any document or materials submitted to any member or agent of the University may be subject to discipline.

## **IDENTIFICATION CARDS**

Each new student is issued a permanent photo identification card, which is validated for every subsequent term in which the student registers; the ID card remains the property of the University. This ID card must be retained by the student while registered at the University. A student who alters or intentionally mutilates a University ID card, who uses the ID card of another, or who allows his or her own ID card to be used by another may be subject to discipline.

A charge of \$17 (amount subject to change), payable at the ID Center, Window 27, 100 Henry Administration Building, is made for replacing each lost, mutilated, confiscated, or stolen photo ID card. A charge of \$1 (amount subject to change) is made for the replacement of each lost, mutilated, confiscated, or stolen ID validation label.

Identification cards for spouses of students are available without cost at the ID Center.



## **STUDENTS IN DEBT TO THE UNIVERSITY**

A penalty of \$15 (amount subject to change) is assessed for each check students present to the University that is returned for insufficient funds or another reason. Additional penalties, including dismissal from the University, may be imposed on students who permit their University accounts to become delinquent or who issue checks that are returned to the University unpaid.

Students who are in debt to the University at the end of any academic term may not be permitted to register in the University again. They are not entitled to receive diplomas, official statements, or transcripts of credits until the indebtedness has been paid or suitable arrangements for payment have been made, unless there are pending bankruptcy petitions of the students seeking a discharge of all such indebtedness or all such indebtedness has been discharged.

## **AUTOMOBILES, MOTORCYCLES, MOTOR SCOOTERS, MOTOR-DRIVEN BICYCLES, AND BICYCLES**

All students, their spouses, and dependent children with valid vehicle operator permits to operate automobiles, motorcycles, motor scooters, and motor-driven bicycles in Illinois may operate them on the Urbana-Champaign campus, provided they comply with University and state regulations. Public parking facilities are extremely limited near the campus. Unless students register their cars with the University, there is little opportunity for them to park near the campus when classes are in session or overnight. By registering their motor vehicles with the University (a fee is charged), students may park or store their vehicles either in some University parking lots or on some University streets. A permit to park or store a car in University rental lots requires payment of an additional fee.

Bicycles provide the best transportation on campus since bike paths connect the major campus buildings. All student bicycles must be registered; there is no fee for this registration.

Information about the operation of motor vehicles and bicycles by students is available from the Division of Campus Parking, University of Illinois at Urbana-Champaign, 505 East Green Street, Champaign, IL 61820, (217) 333-7217.

# Graduation Requirements and Honors

Bachelor’s Degrees and Certificates Conferred .....72

Grade-point Requirements for the Bachelor’s Degree .....74

Residence Requirements for Graduation .....75

General Education Requirements .....76

English Requirement for Graduation .....76

Foreign Language Courses .....76

Religious Foundation Courses .....76

Correspondence and Extramural Courses .....77

Theses .....77

Undergraduate Credit for Service and Education in the Armed Forces .....77

Graduation with Honors .....78

Phi Kappa Phi .....78

The Dean’s List .....78

## BACHELOR’S DEGREES AND CERTIFICATES CONFERRED

A candidate for a bachelor’s degree must meet University requirements with respect to registration, residence, general education, and English, and the minimum scholarship requirements of the student’s college or division; must pass the subjects prescribed in his or her curriculum; and must conform to the requirements of that curriculum in regard to electives and the total number of hours required for graduation.

The Senate Committee on Student Discipline has the right to withhold the conferral of a degree. When dismissal from the University is a possibility because of a disciplinary infraction, the conferral of the degree is withheld until the disciplinary action has been resolved.

## Bachelor’s Degrees

Baccalaureate degrees conferred at the Urbana-Champaign campus with the minimum number of hours required for graduation are listed below.

	<i>Minimum Semester Hours Required for Graduation</i>
<i>Undergraduate College</i>	
<b>College of Agriculture</b>	
Bachelor of Science (B.S.) in	
Agricultural Education (B.S. in Agriculture) .....	130
Agriculture .....	126
Food Industry .....	130
Food Science .....	130
Forestry .....	126
Home Economics Education .....	130
Human Resources and Family Studies .....	126
Interior Design .....	126
Ornamental Horticulture .....	130
Restaurant Management .....	126
Soil Science .....	126
<b>College of Applied Life Studies</b>	
Bachelor of Science (B.S.) in	
Health and Safety Studies .....	128
Leisure Studies .....	126
Kinesiology .....	128



**College of Commerce and Business Administration**

Bachelor of Science (B.S.) in	
Accountancy .....	124
Business Administration .....	124
Economics .....	124
Finance .....	124

**College of Communications**

Bachelor of Science (B.S.) in	
Advertising .....	124
Journalism .....	124
Media Studies .....	124

**College of Education**

Bachelor of Science (B.S.) in	
Business Education .....	126
Early Childhood Education .....	128
Elementary Education .....	124
Occupational and Practical Arts Education .....	128
Secondary Education .....	120
Special Education .....	124

**College of Engineering**

Bachelor of Science (B.S.) in	
Aeronautical and Astronautical Engineering .....	134
Agricultural Engineering .....	128
Ceramic Engineering .....	132
Civil Engineering .....	133
Computer Engineering .....	128
Computer Science .....	122
Electrical Engineering .....	128
Engineering Mechanics .....	128
Engineering Physics .....	128
General Engineering .....	127
Industrial Engineering .....	130
Mechanical Engineering .....	130
Metallurgical Engineering .....	128
Nuclear Engineering .....	127

**College of Fine and Applied Arts**

Bachelor of Fine Arts (B.F.A.) in	
Art Education .....	130
Crafts .....	122
Dance .....	130
Graphic Design .....	122
History of Art .....	122
Industrial Design .....	122
Painting .....	122
Photography .....	122
Sculpture .....	122
Theater .....	128
Bachelor of Landscape Architecture (B.L.A.) .....	128
Bachelor of Music (B.Mus.) .....	130
Bachelor of Science (B.S.) in	
Architectural Studies .....	127
Music Education .....	130
Bachelor of Arts in Urban Planning (B.A.U.P.) .....	120

**College of Liberal Arts and Sciences**

Bachelor of Arts (A.B.) in	
Liberal Arts and Sciences .....	120
Teaching of English .....	128
Teaching of French .....	120
Teaching of German .....	120
Teaching of Latin .....	120
Teaching of Russian .....	123
Teaching of Social Studies .....	120
Teaching of Spanish .....	123
Teaching of Speech .....	132

Bachelor of Science (B.S.) in	
Biochemistry .....	120
Chemical Engineering .....	129
Chemistry .....	120
Geology .....	126
Liberal Arts and Sciences .....	120
Physics .....	126
Speech and Hearing Science .....	128
Teaching of Biology .....	125
Teaching of Chemistry .....	130
Teaching of Computer Science .....	120
Teaching of Earth Science .....	131
Teaching of Mathematics .....	120
Teaching of Physics .....	132
<b>School of Social Work</b>	
Bachelor of Social Work .....	120

**Certificates**

Certificates are conferred upon completion of each of the curricula listed below. A candidate for a certificate must meet the general requirements of the University with respect to registration and minimum scholarship requirements; successfully complete all prescribed subjects and special requirements for the student's curriculum; and conform to the requirements regarding electives and hours required for graduation.

	<i>Semester Hours Required for Certification</i>
<i>Undergraduate Curriculum</i>	
<b>Institute of Aviation</b>	
Aircraft Maintenance Technology .....	76
Professional Pilot .....	65
Combined Professional Pilot/Aircraft Maintenance Technology .....	98

**GRADE-POINT REQUIREMENTS FOR THE BACHELOR'S DEGREE**

All candidates for a degree must have at least a 3.0 (A = 5.0) grade-point average on all University of Illinois at Urbana-Champaign credits counted for graduation requirements and at least a 3.0 grade-point average on the combined transfer and University of Illinois at Urbana-Champaign credits counted for graduation requirements. Certain colleges have established higher scholastic graduation requirements for specific curricula. (Grades in courses taken at the other campus of the University are counted as transferred.)

When a course has been repeated, both the original and subsequent grades are included in the average if the course is acceptable toward graduation, but the credit is counted only once. An original grade is not removed from the student's record for a course subsequently passed by special examination.

Students who do not meet the requirements stated above may graduate if they have the minimum grade-point average calculated by either of the following alternative methods:

- Courses in which grades of D or E have been recorded are excluded, not to exceed a total of 10 semester hours completed prior to the last 30 hours of work completed at the University of Illinois at Urbana-Champaign and counted for graduation requirements, *or*
- A grade-point average of no less than 3.1 is calculated for the last 60 semester hours of work counted for graduation requirements and completed at the University of Illinois at Urbana-Champaign, except in those curricula for which a higher scholastic graduation requirement is specified.

Each college office, on request, will inform students regarding the scholarship regulations of that college.



## RESIDENCE REQUIREMENTS FOR GRADUATION

### First Bachelor's Degree

In addition to meeting specific course and scholastic requirements, each candidate for a bachelor's degree from the University of Illinois at Urbana-Champaign must spend either the first three years earning not less than 90 semester hours or the last year (two semesters, or the equivalent) earning not less than 30 semester hours in residence at the Urbana-Champaign campus, uninterrupted by any work in another institution. Only those courses that are applicable toward the degree sought may be counted in satisfying the above minimum requirements. (Either three twelve-week terms or four eight-week sessions are the equivalent of two semesters).

Concurrent attendance at the University of Illinois at Urbana-Champaign and another collegiate institution does not interrupt the residence requirement for graduation.

Credit earned through the Advanced Placement Program is included in the first 90 semester hours and is not considered as interrupting residence.

Credit allowed toward graduation for completion of courses of study offered by the religious foundations located in Urbana-Champaign is not counted as interrupting residence or counted toward satisfying minimum residence requirements for graduation.

Attendance at another institution under the Committee on Institutional Cooperation Program or participation in the University of Illinois foreign study programs or the Study Away from Campus Programs for which students are registered in Urbana-Champaign courses does not interrupt residence, and credits earned through these programs are counted as residence credit toward graduation, provided that within the last two years of study at least 30 semester hours have been earned in courses taken on the Urbana-Champaign campus.

Transfer students from junior colleges must, after attaining junior standing, earn at the University of Illinois at Urbana-Champaign or any other approved four-year institution at least 60 semester hours acceptable toward their degrees, in addition to meeting the usual residence requirement for degrees from the University of Illinois at Urbana-Champaign.

Students transferring from the University of Illinois at Chicago to the Urbana-Champaign campus as candidates for degrees must satisfy the residence and academic requirements for graduation established for the curriculum entered on the Urbana-Champaign campus. Since the campuses do not have identical academic programs, a student who is contemplating a transfer should consult with the college into which he or she expects to transfer.

A student attending as "visitor only" is not considered a "student in residence."

A student who requests that the residence requirement for graduation be waived must submit a petition to the dean of his or her college, who will take action on the petition.

A student on drop status may not graduate until he or she has been reinstated by the dean of the student's college. A student who meets the conditions stated in the first paragraph of this section must notify the dean of his or her college of the student's intent to apply credit earned elsewhere toward the degree requirements and arrange to have a final official transcript from the other collegiate institution(s) attended sent to the Office of Admissions and Records.

### Second Bachelor's Degree

A student who has received one bachelor's degree may be permitted to receive a second bachelor's degree from the University of Illinois at Urbana-Champaign provided that all specified requirements for both degrees are fully met and that the curriculum offered for the second degree includes at least the final 30 semester hours that are earned in residence at the Urbana-Champaign campus and not counted for the other degree.

The second bachelor's degree may be earned either concurrently with or subsequent to the first degree.

A candidate for a second bachelor's degree must meet the same residence requirements as for the first degree.

Only those courses that are acceptable toward the degree sought may be counted in satisfying the above minimum requirements. This includes the 30 additional hours required for the second degree.

## GENERAL EDUCATION REQUIREMENTS

A minimum of 6 hours each in the humanities, the social sciences, and the natural sciences is required for graduation in all undergraduate curricula. Approved courses should be distributed over at least three years. Upon request, individual colleges will provide students with the general education requirements for their curricula and the list of courses acceptable for this purpose.

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

## ENGLISH REQUIREMENT FOR GRADUATION

Satisfactory proficiency in the use of English is a requirement for all undergraduate degrees awarded at the Urbana-Champaign campus of the University. This proficiency can be certified by the satisfactory completion of a one-semester, 4-hour course of either Rhetoric 105 or 108 or by the satisfactory completion of the two-semester, 6-hour sequence of Speech Communication 111 and 112 (Verbal Communication). A student with a sufficiently high score on either the ACT English Subtest or the SAT Verbal Test and high performance on a written essay examination will satisfy the English requirement for graduation.

If the academic credentials of a transfer student do not indicate fulfillment of course work equivalent to the University of Illinois's English graduation requirement, the student may be administered the Rhetoric Placement and Proficiency Examination, the ESL Placement Test, or the Transfer Writing Examination.

Under certain conditions, students may satisfy the English requirements for graduation through satisfactory completion of courses offered by the Division of English as an International Language. Satisfactory completion of courses (ESL 114 and ESL 115) satisfies the English graduation requirement. Evidence that a student is eligible to enroll in these courses is established by a satisfactory score on the ESL Placement Test, a test of oral and written English administered by the Division of English as an International Language. On the basis of this test, the student will be enrolled in the course or courses appropriate to his or her English needs.

If a student's score on the ESL Placement Test is higher than the proficiency level of students in ESL 115, that student must take the Rhetoric Placement and Proficiency Examination offered by the Department of English.

Those students whose deficiency in English requires that they take one or more of the noncredit courses ESL 109, ESL 110, and ESL 111 are not allowed to register for a full academic program and must complete their noncredit requirements before enrolling in the ESL 114-115 sequence.

## FOREIGN LANGUAGE COURSES

Except as prohibited or limited by the established policy of the student's college, credit in University foreign language courses taken to remove high school entrance deficiencies may, at the discretion of the college, be counted in the total hours required for graduation or be accepted in partial or complete satisfaction of the foreign language requirement for the degree.

Normally no more than 10 hours of proficiency credit for the study of a single foreign language at the elementary and intermediate level shall be counted for graduation in the College of Liberal Arts and Sciences. Additional credit may be granted for advanced courses emphasizing literature and language structure rather than communicative competence in the language.

## RELIGIOUS FOUNDATION COURSES

Courses of study offered by the religious foundations located in Urbana-Champaign that have been approved by the College of Liberal Arts and Sciences Committee on Courses and Curricula are accepted for credit by the University provided that the student is currently registered in University courses. Registration in these courses is limited to students of sophomore standing or above who are currently registered on campus in University courses and must be approved in advance by the dean of the student's college. Grades in these courses



are not included in the student's all-University scholastic average, and the courses are not counted as interrupting residence or toward satisfying minimum residence requirements for graduation.

A maximum of 10 semester hours of credit in religious foundation courses may, with the approval of the dean of the college concerned, be counted toward graduation.

The above credit limitations and other restrictions apply to religious foundation courses only and *not* to courses offered by the University of Illinois Program in Religious Studies.

## CORRESPONDENCE AND EXTRAMURAL COURSES

After matriculation, a student may count toward his or her degree, with the approval of the dean of the student's college, as many as 60 semester hours of credit earned in extramural and/or correspondence study, provided that:

- The student completes all of the remaining requirements for the degree in residence at the University of Illinois at Urbana-Champaign, *or*
- The student presents acceptable residence credit for work done elsewhere and completes requirements needed for his or her degree in residence at the University. In all cases, the senior year (two semesters of not less than 30 semester hours) must be done in residence at the University of Illinois at Urbana-Champaign.

A student who has completed the first three years in residence at the University of Illinois at Urbana-Champaign, earning a minimum of 90 semester hours, may do all or part of the senior year in correspondence or extramural study, subject to meeting all of the requirements for the degree.

Credit for correspondence work taken with fully accredited institutions may be allowed, but only on approval of the dean of the student's college.

## THESES

If a thesis is to be submitted in partial fulfillment of the requirements for a bachelor's degree, the subject must be announced by the end of the sixth week of instruction in the first semester of the student's senior year. The work must be done under the direction of a professor in the department concerned and must be applicable to the curriculum in which a degree is expected. A maximum of 10 hours of credit in thesis work may be counted toward a bachelor's degree.

## UNDERGRADUATE CREDIT FOR SERVICE AND EDUCATION IN THE ARMED FORCES

The University grants registered students college credit for certain training and experience in the armed forces of the United States. A student who completes military service in the U.S. Air Force, Army, Marine Corps, Navy, or Coast Guard, including basic or recruit training of six months or more, is awarded 4 semester hours of credit in basic military science upon presentation of evidence on Form DD-214 of honorable discharge or transfer to the reserve component.

Correspondence courses for which the student has passed the end-of-course examination prepared by the U. S. Armed Forces Institute, that are baccalaureate-oriented, and that correspond in level and content to courses offered at the University of Illinois at Urbana-Champaign are recognized for credit.

Credit recommendations in the *Guide to the Evaluation of Education Experiences in the Armed Forces* (published by the American Council on Education) for military service school training will be considered for transfer credit as follows: (1) credit will be granted for college-level, baccalaureate-oriented training and education, (2) vocational credit related to the student's curriculum choice will be referred for consideration to the dean of the college in which the student is enrolled, and (3) duplicate credit will be deleted. Applicability of military credit toward a particular degree is determined by the dean of the college. Additional information may be obtained from the Office of Admissions and Records.

## GRADUATION WITH HONORS

Recognition for superior academic achievement is given by the University and by the colleges and departments.

### University Honors

Continuous academic achievement is recognized by inscribing the student's name on a Bronze Tablet that hangs on a wall of the Main Library. To qualify, an undergraduate student must:

- Have at least a 4.5 (A = 5.0) cumulative grade-point average for all work taken at the University through the academic term prior to graduation, and
- Rank, on the basis of his or her cumulative grade-point average (including University of Illinois at Urbana-Champaign and transfer work, if any) through the academic term prior to graduation, in the top 3 percent of the students in his or her college graduating class.

Transfer students, in addition to meeting the general rules for qualification, must satisfy two additional requirements: they must have cumulative University of Illinois at Urbana-Champaign grade-point averages as high as the lowest ones listed for students in their colleges who qualify on the basis of having completed all of their work at the University of Illinois at Urbana-Champaign; and they must earn 40 or more semester hours at the University of Illinois at Urbana-Champaign through the academic term prior to graduation.

For the purpose of this award, *college graduating class* means all students receiving bachelor's degrees from the same University of Illinois at Urbana-Champaign college between July 1 of each year and June 30 of the next.

For the purpose of this award, *academic term prior to graduation* means: for August graduates, the preceding spring semester; for October graduates, the preceding spring semester; for January graduates, the preceding summer session; for May graduates, the preceding fall semester. The list will be determined each year after grades for the fall semester are available. To be considered in the calculation of University Honors, all grade corrections must be recorded by the end of the eighth week of the spring semester.

### College Honors

Each college, with the approval of the Urbana-Champaign Senate and the Board of Trustees, prescribes the conditions under which degree candidates may be recommended for graduation with honors. These distinctions are noted on students' diplomas, permanent University records, and official transcripts of credits. Detailed information concerning the requirements for graduation with honors is included in the sections of this catalog applying to the individual colleges and departments.

## PHI KAPPA PHI

The national honor society of Phi Kappa Phi recognizes and encourages superior scholarship in all academic disciplines. To be eligible, a junior (72 to 89 letter-graded hours) must have a minimum cumulative grade-point average of 4.75 *and* a scholastic rank in the upper 5 percent of the junior class; seniors (90 or more letter-graded hours) must have a minimum cumulative grade-point average of 4.5 *and* a scholastic rank in the upper 10 percent of the senior class.

Invitations to membership are mailed to all eligible juniors and seniors, and an initiation program is held near the end of each semester.

## THE DEAN'S LIST

The names of undergraduates who have achieved grade-point averages for a given semester in the top 20 percent of their college class will be included on a list prepared for the dean of the college. (In the College of Fine and Applied Arts, the names of eligible undergraduates who have achieved grade-point averages for a given semester in the top 20 percent of all students *in their curriculum* will be listed.) This list is publicized within the University and is sent to news agencies throughout the state. Names of James Scholars are preceded by an ampersand (&).

To be eligible for Dean's List recognition, students must complete successfully 14 academic semester hours, of which at least 12 must be taken for letter grade (A, B, C, D, E, AB). Only grades in hand at the time the list is compiled will be considered in determining eligibility.



unless it can be established that the final grade average will be above the minimum required regardless of the grade eventually received; students with EX, DF, or missing grades will be added as soon as letter grades are received and eligibility can be determined. Credits earned during the semester through proficiency, CLEP, and advanced placement examinations may *not* be counted toward the 14-semester-hour requirement.

Individual colleges may modify the above criteria, and interested students should contact their college offices for further information.

The College of Liberal Arts and Sciences has different eligibility requirements, which are given in detail in the *LAS Student Handbook*.

# Reserve Officers' Training Corps

Army ROTC ..... 80

Naval ROTC ..... 82

Air Force ROTC ..... 84

## ARMY ROTC

Military training has been given at the Urbana-Champaign campus since the University opened in 1868. Originally mandatory for all male undergraduates under the land-grant charter, the program became entirely voluntary in 1964. The Army Reserve Officers' Training Corps is open to all university students, regardless of their academic majors or levels.

### Program Description

The Army Reserve Officers' Training Corps is an elective program that provides career opportunities, leadership experience, adventure training, and financial support to participating students. The program is a consecutive series of elective courses, leadership laboratories, and field trips designed to prepare young men and women for leadership positions as officers in the U. S. Army, Army Reserve, and Army National Guard. The leadership principles and management techniques presented, however, are equally applicable to success in any field. Financial support is provided both by state, federal, and named scholarships and by a subsistence allowance of \$100 a month.

### Leadership Training

Students' leadership is continuously developed through a Leadership Assessment Program (LAP). The LAP evaluates students' leadership potential in a variety of leadership roles and provides immediate feedback to students. Emphasis is on hands-on leadership experience. Cadets plan, organize, and evaluate much of the laboratory and field training.

### Adventure Training

Training in mountaineering techniques (rappelling), land navigation, survival, rifle marksmanship, and waterborne operations is given to every student. Some students are selected to attend the army parachute school, helicopter operations school, and leadership training with active and reserve units as officers.

### Financial Assistance Scholarships

Enrollment in Army ROTC can provide significant financial support to interested students, regardless of family financial need. Army ROTC offers three financial aid programs that provide support to Army ROTC cadets: the Army ROTC Federal Scholarship program, the Illinois State ROTC Scholarship program, and the Simultaneous Membership Program of the Army ROTC and the National Guard or Army Reserve. The federal scholarships are competitive scholarships available for college-bound high school juniors and seniors, and college freshmen and sophomores. These scholarships provide funds for tuition, university fees, books, and \$100 a month for four, three, or two years, depending on the time of application. Illinois State ROTC Scholarships are competitive scholarships that provide full tuition waivers for ROTC students who are residents of the state. The Simultaneous Membership Program allows students to join the Army Reserve or Army National Guard and also to join Army ROTC. The program provides the student with increased reserve forces pay, benefits of the New GI Bill, and \$100 a month from Army ROTC. Engineering students who are enrolled in Army ROTC are eligible for other additional financial aid through named scholarships. These students should contact the ROTC office for further details. All Army ROTC cadets, as a minimum, receive \$100 a month for their last two years in the program if they meet the requirements for continuing.

### Career Opportunities

The training and instruction are designed to prepare students to serve as officers in the U.S. Army. This may be full time, on active duty, or part time with the Army Reserve or National



Guard. Service with the reserve forces allows pursuit of a civilian career while simultaneously serving the country as an officer. Approximately half of Army ROTC graduates pursue civilian careers and have discovered that their ROTC leadership training is an invaluable tool for success. For engineering students, a COOP program is available to allow students to work with government laboratories and projects while participating in the Army ROTC program.

Program Options

- 1. Four years—the student attends one military science course each semester.
- 2. Three and one-half years—the student takes two military science courses during the first semester, then one course each semester thereafter.
- 3. Three years—the student takes two military science courses per semester during the first year, then one course each semester thereafter.
- 4. Two years—those students with prior military experience (junior ROTC, prior military service) may receive credit for the first two years of Army ROTC and begin with the second two years. Also, students who are interested in the program, but who were not involved in ROTC during their first two years of college, may join during these last two years by attending a six-week camp during the summer, for which each student receives more than \$600 in pay.

Academic Program

The first- and second-year educational program in military science consists of the courses MIL S 111, 113, 121, and 123. These 1-hour courses are designed to give students a basic understanding of the national defense establishment, the role of the U.S. Army officer, military tactics, and military-related skills.

The third and fourth years of military science, consisting of MIL S 231, 233, 241, and 243, are designed to develop the skills and attitudes vital to assuming leadership positions.

A leadership laboratory is required with each academic course. The leadership laboratory is one hour per week for the first two years and two hours per week the last two years. Practical experience is provided in military and leadership skills in a framework that provides maximum opportunity to develop each student’s self-confidence, decisiveness, and leadership potential.

To develop the student's academic diversity, each student must complete a course in math reasoning, computer literacy, human behavioral science, oral/written communications, and military history, prior to being commissioned. These courses may be used to fulfill other academic degree requirements.

FIRST YEAR	
FIRST SEMESTER	HOURS
MIL S 111--Introduction to Military Science .....	1
SECOND YEAR	
FIRST SEMESTER	HOURS
MIL S 121--Land Navigation .....	1
THIRD YEAR	
FIRST SEMESTER	HOURS
MIL S 233--Military Leadership .....	2
FOURTH YEAR	
FIRST SEMESTER	HOURS
MIL S 241--Military Law .....	2

FIRST YEAR	
SECOND SEMESTER	HOURS
MIL S 113--Basic Military Marksmanship .....	1
SECOND YEAR	
SECOND SEMESTER	
MIL S 123--Military Tactics .....	1
THIRD YEAR	
SECOND SEMESTER	HOURS
MIL S 231--Military Operations .....	3
FOURTH YEAR	
SECOND SEMESTER	HOURS
MIL S 243--Military Ethics and Professionalism ..	2

Enrollment in the third- and fourth-year courses and laboratories requires instructor approval. Non-U.S. citizens may require the consent of their governments to be ROTC students.

Enrollment in laboratories requires instructor approval, and students must meet service entrance requirements.

Additional Information

For additional information regarding any of these programs, contact the professor of military science, University of Illinois at Urbana-Champaign, 113 Armory Building, 505 East Armory Street, Champaign, IL 61820, (217) 333-1550.

## NAVAL ROTC

The Naval ROTC program is a professional educational opportunity in which a student can earn a regular or a reserve commission in the U.S. Navy or Marine Corps while pursuing a baccalaureate degree. This professional foundation is then developed and broadened during active service as a commissioned officer after graduation and commissioning. A student may be enrolled in either the Navy Scholarship Program or the Navy College Program (nonscholarship). There are four-year programs for entering freshmen and two-year programs for students who have already completed part of their college education.

For scholarship students, no military obligation is incurred until the beginning of the sophomore year. College program students incur the military obligation at the commencement of the junior year. Naval science courses are open to all students, upon consent of the Department of Naval Science, even if they are not enrolled in either of these programs.

### Four-Year Navy-Marine Scholarship Program

The Navy-Marine Scholarship Program provides the student with full tuition, fees, books, and a tax-free subsistence pay (currently \$100 per month) for as long as four years. A student in good standing and enrolled in a degree program that requires longer than four years to complete may apply for fifth-year scholarship benefits with agreement to serve additional active service after commissioning, or the student may take a leave of absence of as long as a year to finish the baccalaureate degree. Upon graduation, scholarship students are commissioned in the regular U.S. Navy or U.S. Marine Corps and serve four years on active duty. Newly commissioned officers who qualify have the opportunity to continue their education toward advanced degrees.

Scholarship selection in national competition is based on the applicant's Scholastic Aptitude Test (SAT) or American College Testing (ACT) Program score, high school and college records, aptitude for naval service as judged by interviews, and by prescribed physical qualifications.

Scholarship students have an opportunity during the summer to practice what they have learned in the classroom. Three summer training periods of approximately four to six weeks each are taken by students either at sea aboard a U.S. Navy vessel; at a squadron or amphibious base, or at a naval air station; or on board a nuclear submarine. Students who choose to enter the U.S. Marine Corps spend their last summer training period at the Marine Corps Officer Candidate School in Quantico, Virginia.

### Four-Year Navy-Marine College Program

A Navy-Marine College Program student receives all required uniforms and naval science textbooks while enrolled, and a subsistence allowance (currently \$100 per month) during the junior and senior years. If the degree program requires longer than four years to complete, the student may apply for a fifth-year benefit of subsistence pay with agreement of additional active service after commissioning or may take a leave of absence as long as a year to finish the baccalaureate degree. Upon graduation, the college program student is commissioned in the U.S. Naval or U.S. Marine Corps Reserve and serves three of the six years of reserve obligation on active duty.

A student may apply for admission to the college program through the professor of naval science, who makes the final selection. This selection is based on academic, physical, and military aptitude criteria. College program students also attend one summer training session, usually after the junior year.

College program students are eligible to be selected for the scholarship program through recommendation of the professor of naval science; the decision is made by the chief of naval education and training. These students are also eligible to receive Illinois State ROTC Scholarships (if residents of this state) after at least one semester in the college program. These scholarships are awarded annually on a competitive basis and cover tuition only.

### Two-Year College Program

This program provides a student with all required uniforms, naval science textbooks, and subsistence pay (currently \$100 per month). Applicants should have two remaining years of study at the Urbana-Champaign campus. During the summer before the junior year, students attend a six-week course of military instruction at the Naval Science Institute at Newport, Rhode Island. Transportation costs and salaries are paid to the students. After successful completion of the course, they join their contemporaries in the college program and also may



be eligible for appointment to scholarship status, depending on their backgrounds and academic performances. College program students participate in a four-to-six-week summer at-sea training period between their junior and senior years, as do their scholarship counterparts.

Two-Year Scholarship Program

Acceptance into the Naval ROTC Two-Year Scholarship Program training option guarantees a student a two-year Naval ROTC scholarship. Summer training and other benefits, as well as Naval ROTC training during the junior and senior years, are the same as those for the two-year college program. Prerequisites for this option include at least one year each of calculus and physics, with a C average or better. A minimum grade-point average of 3.0 is required, with a preferred major of mathematics, chemistry, physics, or engineering.

State Navy ROTC Scholarship

For information regarding the state Navy ROTC scholarships, see page 66.

Requirements

In addition to mental, physical, and aptitude requirements, men and women in the Naval ROTC program must:

- Be citizens of the United States.
- Be between 17 and 21 years of age by September 1 of the year in which enrollment begins (those contemplating a bachelor's degree that requires five years to complete must be younger than age 20 on June 30 of that year). If younger than age 18, they must have the consent of their parents. Scholarship students must be younger than age 25 on June 30 of the calendar year in which they are commissioned. College program students must meet identical requirements except that they must be younger than age 27<sup>1</sup>/<sub>2</sub> on June 30 of the calendar year in which commissioned.
- Have no moral obligations or personal convictions that will prevent them from executing the oath of office.

Naval ROTC students have a two-hour naval science laboratory course, NS 100, each week for which there is no credit, and also take the following naval science and University academic courses.

<b>FIRST YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
NS 111--Naval Orientation .....	2
<b>SECOND YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
NS 121--Naval Ship Systems II .....	3
<b>THIRD YEAR (NAVY)</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
NS 231--Naval Operations and Navigation I .....	3
<b>THIRD YEAR (MARINE)</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
HIST 281--War, Military Institutions, and Society to 1815 .....	3
<b>FOURTH YEAR (NAVY)</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
B ADM 210--Management and Organizational Behavior .....	3
<b>FOURTH YEAR (MARINE)</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
NS 293--History of Amphibious Warfare .....	3

<b>FIRST YEAR</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
NS 112--Naval Ship Systems I .....	3
<b>SECOND YEAR</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
NS 124--Sea Power and Maritime Affairs .....	2
<b>THIRD YEAR (NAVY)</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
NS 232--Naval Operations and Navigation II .....	3
<b>THIRD YEAR (MARINE)</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
HIST 282--War, Military Institutions, and Society since 1815 .....	3
NS 291--Evolution of Warfare .....	3
<b>FOURTH YEAR (NAVY)</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
NS 242--Naval Leadership and Management II ..	2

Each scholarship student's degree program must also include the following University courses (not required for Marine Corps option students):

**SEMESTERS**

Calculus .....	2
Physics (calculus-based) .....	2
Foreign language .....	1
English .....	2
US Military Affairs/National Security Policy .....	2
Computer Science .....	1

Marine option students are to complete one semester of political science as directed by the marine officer instructor.

College program (nonscholarship) students, who are not governed by federal scholarship requirements, must complete two semesters of college mathematics and the physical sciences as a prerequisite to commissioning.

**Additional Information**

Further information regarding Naval ROTC may be obtained in person from or by writing to the professor of naval science, University of Illinois at Urbana-Champaign, 236 Armory, 505 East Armory Street, Champaign, IL 61820, (217) 333-1061.

**AIR FORCE ROTC**

The Air Force ROTC program at the University of Illinois at Urbana-Champaign offers the opportunity for a professional training program for those college men and women who desire to serve in the U.S. Air Force as commissioned officers. Air Force ROTC offers both a four-year and a two-year program leading to a commission as an Air Force officer. Four-year program students complete both the general military course and the professional officer course. Two-year students complete only the professional officer course. All registered University of Illinois students may take University-accredited aerospace courses.

**General Military Course**

The educational program for the first two years in Air Force Aerospace Studies consists of AFAS 111, 112, 121, and 122. These 1-hour courses are designed to give students basic information on world military systems and the role of the U.S. Air Force in the defense of the free world. All required aerospace studies textbooks and uniforms are provided free. The general military course is open to all students at the University of Illinois without advance application and does not obligate students to the Air Force in any way.

**Field Training**

Air Force ROTC field training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of field training, usually between their sophomore and junior years. Students applying for entry into the two-year program must successfully complete six weeks of field training prior to enrollment in the professional officer course. The Air Force pays all expenses associated with field training.

The major areas of study in the four-week field training program include junior officer training, aircraft and air crew orientation, career orientation, survival training, base functions and Air Force environment, and physical training. The major areas of study included in the six-week field training program are essentially the same as those conducted at four-week field training plus the general military course including AFAS 102—Leadership Laboratory.

**Professional Officer Course**

The third and fourth years of Air Force aerospace studies instruction, consisting of AFAS 231, 232, 241, and 242, are designed to develop skills and attitudes vital to the career professional officer. Students completing the professional officer course are commissioned as officers in the U. S. Air Force upon college graduation. All students in the course receive a nontaxable subsistence allowance of \$100 per month during the two-semester academic year. Students wanting to enter the course in nonflying categories should apply early in the spring semester in order to begin this course of study in the following fall semester. Students applying for pilot



and navigator categories should apply in the fall semester the year before entering the professional officer course. Final selection of students rests with the professor of aerospace studies. Each member of the course must:

- Be a citizen of the United States.
- Be a full-time student at the University.
- Have at least two years remaining at the University as an undergraduate and/or graduate student upon entry to the program.
- Pass an Air Force physical examination.
- Be able to complete all requirements for commissioning before reaching age 26<sup>1/2</sup> for a flying candidate or age 30 for a nonflying candidate.
- Complete summer field training.
- Achieve a qualifying score on the Air Force Officer Qualifying Test.
- Complete Rhetoric 105 or its equivalent and a college-level mathematics course before graduation.
- Execute a written agreement with the U.S. government to complete the course, accept a reserve commission in the U.S. Air Force upon graduation, and serve four years on active duty after graduation. Pilot candidates agree to serve ten years, and navigators six years, on active duty after completion of flying training.
- Enlist in the Air Force Obligated Reserve Section; this enlistment is terminated upon acceptance of a commission.
- Possess and maintain a quality grade-point average meeting the requirements of the student's college.
- Not be a conscientious objector, nor possess other disqualifying characteristics to a commission, established by law or the Department of Defense.

## Leadership Laboratory

AFAS 102—Leadership Laboratory is required for officer candidates in both the general military course and the professional officer course. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's leadership potential. Leadership Laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, and career opportunities, and the life and work of an Air Force junior officer. Students develop leadership potential in a practical, supervised laboratory, which typically includes field trips to Air Force installations throughout the United States. This laboratory is restricted to individuals enrolled in the precommissioning program only.

## Air Force ROTC College Scholarship Program

This program provides scholarships to selected students through participation in the Air Force ROTC. During their participation in the program at the University of Illinois at Urbana-Champaign, students receive \$100 per month along with paid tuition, fees, laboratory expenses, and required textbooks.

In order to be eligible for this scholarship, a student must:

- Be a citizen of the United States.
- Be at least 17 years old on the date of enrollment and younger than age 25 on June 30 of the estimated year of commissioning.
- Pass a physical examination administered by a physician of the U.S. Air Force.
- Be selected by a board of Air Force officers.
- Have no moral objections or personal convictions that will prevent bearing arms and supporting and defending the Constitution of the United States against all enemies, foreign and domestic. An applicant must not be a conscientious objector.
- Achieve a qualifying score on the Air Force Officer Qualifying Test.
- Maintain a quality grade-point average.
- Complete at least one course in a foreign language before commissioning.
- Enlist in the Air Force Reserve. This enlistment is terminated by acceptance of a commission as a second lieutenant in the U.S. Air Force.
- Execute a written contract with the U.S. government agreeing to complete the Air Force ROTC program, to attend summer field training at the specified time, to accept a reserve commission in the Air Force upon graduation, and to serve four years on active duty after graduation.

High school students should apply for this scholarship late in the junior year or early in the senior year. High school students may get applications from their guidance counselors or from Air Force ROTC Detachment 190, University of Illinois at Urbana-Champaign, 223 Armory Building, 505 East Armory Avenue, Champaign, IL 51820, (217) 333-1927. Completed applications must be received no later than December 1 of the year before the student intends to enter college.

For students already enrolled in the University of Illinois at Urbana-Champaign, 3<sup>1</sup>/<sub>2</sub>-, 3-, 2<sup>1</sup>/<sub>2</sub>-, and 2-year scholarships are available. Applications can be submitted through the Air Force ROTC administration office, 223 Armory Building.

### **State Air Force ROTC Scholarships**

For information regarding Illinois Air Force ROTC Scholarships, see page 66.

### **Additional Information**

Further inquiry concerning the Air Force ROTC program at the University should be directed to Air Force ROTC, Detachment 190, University of Illinois at Urbana-Champaign, 223 Armory Building, 505 East Armory Avenue, Champaign, IL 61820.



# Council on Teacher Education

Teacher Education Curricula .....	87
Admission Requirements .....	88
Requirements for Continuation in Teacher Education .....	89
Student Teaching .....	89
Teacher Certification .....	90
Educational Placement .....	92

Five colleges of the University of Illinois at Urbana-Champaign offer bachelor’s degree programs in teacher education: the Colleges of Agriculture, Applied Life Studies, Education, Fine and Applied Arts, and Liberal Arts and Sciences. The Council on Teacher Education is responsible for the coordination of teacher education curricula at the Urbana-Champaign campus and for liaison between the campus and state certification authorities. The offices of the council are located in 120 Education Building.

Students may consult their teacher education advisers or the certification officer of the Council on Teacher Education, 120 Education Building, for additional information concerning academic regulations and other policies affecting teacher education. Consult the executive director of the council for information concerning the “Grievance Policy and Procedure for Students in Teacher and Administrative Certification Programs under the Purview of the Council on Teacher Education.”

## TEACHER EDUCATION CURRICULA

A student seeking certification must complete the requirements of his or her chosen curriculum and the Council on Teacher Education. Teacher education curricula and the colleges that offer them are listed below. All teacher education curricula have been approved by the National Council for the Accreditation of Teacher Education (NCATE) and the Illinois State Board of Education through 1991. Extension of state board approval through 1996 is pending completion of the mandated fifth-year review.

Students are advised that certification requirements may be altered at any time by the State Teacher Certification Board or the legislature. In such cases, students may be compelled to satisfy the new requirements to qualify for the University’s recommendation for certification.

### College of Agriculture

Agricultural education .....	108
Vocational home economics .....	126

### College of Applied Life Studies

Physical education: curriculum and instruction .....	136
--	-----

### College of Education

Business education .....	166
Early childhood education .....	168
Education of persons with moderate to severe disabilities .....	172
Elementary education .....	169
English .....	161
General science .....	162
Life science .....	163
Mathematics .....	164
Physical science .....	164
Social studies .....	165
Technical education specialties .....	170

### College of Fine and Applied Arts

Art education .....	217
Music education .....	233

**College of Liberal Arts and Sciences**

Biology .....	305
Chemistry .....	306
Computer science .....	307
Earth science .....	308
English .....	309
French .....	310
German .....	311
Latin .....	312
Mathematics .....	314
Physics .....	315
Russian .....	312
Social studies .....	316
Spanish .....	313
Speech .....	317

If the chosen curriculum requires a minor, it must be selected from the list of approved teacher education minors below. In the presence of compelling circumstances, students may consult with appropriate faculty members to propose unique minors. Such a proposal and its rationale must be submitted by petition for the college's approval. Students should be aware that the state recognizes teaching fields that are not listed below and does not recognize some that are. Students in curricula that do not require a minor and students seeking to complete more than one minor or additional teaching field may obtain information about state minimum requirements from the certification officer of the Council on Teacher Education, 120 Education Building.

**Teacher Education Minors**

Accountancy .....	150	Italian .....	319
Adult and continuing education* .....	166	Journalism .....	157
Art education .....	218	Latin .....	319
Biology .....	321	Library science .....	330
Chemistry .....	321	Mathematics .....	320
Cinema studies* .....	322	Physical education .....	136
Computer science .....	320	Physical science .....	321
Earth science .....	321	Physics .....	322
Economics .....	150	Portuguese .....	319
English .....	318	Psychology .....	322
English as a second language .....	318	Rhetoric .....	318
French .....	319	Russian .....	320
General science .....	321	Social studies .....	322
German .....	319	Spanish .....	320
Health education .....	133	Speech .....	319
History .....	322	Urban studies* .....	239
Instructional applications of computers* .....	166	Women's studies* .....	322

---

\*These minors do not lead to endorsements for additional teaching fields.

---

**ADMISSION REQUIREMENTS**

Applicants to teacher education curricula must meet the admission requirements of the colleges and departments offering the chosen curricula. A student whose cumulative grade-point average is less than the stated minimum may apply for admission but will be considered individually on a petition basis if enrollment vacancies exist in the college and curriculum to which admission is being sought. If admitted, such a student may be placed on provisional status by the Council on Teacher Education.

In compliance with recent state legislation, all students entering teacher education programs must demonstrate basic proficiency in reading, mathematics, and language arts. Compliance with this mandate is monitored by the Council on Teacher Education. Students should consult their advisers or the certification officer for further information.



## REQUIREMENTS FOR CONTINUATION IN TEACHER EDUCATION

To be eligible for continuation in teacher education, candidates must have University of Illinois and cumulative grade-point averages of 3.5 (A = 5.0) or higher. In addition, candidates must meet grade-point requirements specific to their programs. The Council on Teacher Education reviews each student's academic progress every semester. Students who do not meet the grade-point average criteria will receive warning letters from the council advising them that their entry into student teaching and their receiving recommendations for certification from the University are at risk. Students will be directed to their college deans for more information.

In addition, students are screened just prior to student teaching and just after its completion by faculty committees that assess the overall record of their performance in the program. It is common knowledge that teaching effectiveness is influenced not only by academic proficiency, but also by the personal characteristics and health of the teacher. Recognizing the importance of these personal factors, the faculty takes them into account in making judgments of students' progress in the program. In addition, counseling and medical services are available for all students. A student wishing additional information regarding these services may make an appointment by calling the director of student teaching of the Council on Teacher Education at (217) 333-4898, or by visiting 32 Education Building.

Since it is essential that counseling and medical services be offered as soon as the need becomes apparent, teacher education advisers and faculty members are asked to participate in this effort. Staff members are invited to recommend for assistance or examination any student about whom concern is felt. A student who is recommended for assistance or examination will receive a written request to make an appointment to discuss matters in which a counselor or physician may be of assistance. A student who receives a letter of this nature must respond to the request as a requirement of the Council on Teacher Education. Failure to respond will jeopardize the continuation of the student in teacher education. During the appointment, the student will be informed of the services available on this campus. The use of these services will usually be optional. In exceptional cases, however, a student may be required to satisfactorily complete a mental health or physical examination with one of the campus services. Such referrals are mandatory for students who wish to continue in teacher education.

## STUDENT TEACHING

Students should apply for tentative student teaching assignments on completion of 55 semester hours of credit. Student teaching application forms may be obtained from the appropriate student teaching office. (Referral to the appropriate office may be obtained by contacting the central Office of Student Teaching, 32 Education Building, 333-4898.) A student who is eligible to apply for assignment should contact the appropriate office of student teaching early in the fall semester. A student who will not be on campus during the fall semester, but who expects to enroll in educational practice (student teaching) during the next school year, should secure an application form from his or her office of student teaching before leaving campus. The latest date for any currently enrolled, eligible student to apply for a student teaching assignment for the following academic year is the end of the second week in December. Students who apply after this date cannot be guaranteed a student teaching assignment during the next academic year.

On completion of 75 or more semester hours, a student who has submitted an application will receive a student teaching assignment pending verification that the student: (1) has completed all professional education course work and 100 hours of early field experience, (2) has University of Illinois and cumulative grade-point averages of 3.5 (A = 5.0) or higher, (3) has the minimum grade-point average required for his or her program, and (4) has received a recommendation for placement in student teaching from the appropriate faculty committee.

Only those students officially registered in teacher education curricula are eligible for student teaching. Students who are on academic or disciplinary probation will not be permitted to student teach. The Council on Teacher Education reserves the right to deny student teaching placement to students whose performance in course work or in early field experiences has been judged to be unsatisfactory by professional standards, including scholarship, ethics, and responsibility, as determined by the faculty and staff in consultation with cooperating school personnel. Satisfactory performance is not based solely on grades.

Students in teacher education should anticipate and plan for student teaching assignments off campus. For most students, additional expense will be incurred during the semester in which student teaching is scheduled. Students cannot be guaranteed assignments in local schools. Attempts will be made to honor such requests; however, this is not always possible due to the limited number of available sites.

A student who wishes to complete student teaching through another university, yet receive a University of Illinois degree and recommendation for certification, must secure the prior approval of his or her adviser, college, and the Council on Teacher Education via petition.

## **TEACHER CERTIFICATION**

### **General Requirements**

A student who completes all of the course work and other requirements in a program approved for purposes of certification by the Illinois State Board of Education is entitled to receive the recommendation of the University for the appropriate certificate, providing that the candidate: (1) is a U.S. citizen (or has filed a Declaration of Intention to become a citizen), is of good character and good health, and is at least nineteen years of age; (2) is recommended for certification by his or her program coordinator or department chairperson based on criteria approved by the council; (3) has University of Illinois and cumulative grade-point averages of 3.5 (A = 5.0) or higher; and (4) has the minimum grade-point average required in his or her program.

Please note that, although a student may be denied a recommendation for certification, he or she may be granted a degree. A student who believes that the recommendation for certification has been withheld unjustly may seek redress through the grievance policy established by the Council on Teacher Education. A copy of the policy and the allied procedures may be obtained from the executive director of the Council on Teacher Education, 120 Education Building.

Students who enroll in advanced foreign language, chemistry, or mathematics courses as a result of performance on a placement examination are often eligible to receive prerequisite credit for teacher certification purposes only. A student who is qualified to receive prerequisite credit, and who has declared one of these areas as his or her major or minor, should consult his or her teacher education adviser prior to graduation.

### **General Education**

The Council on Teacher Education has adopted a common general education core for all undergraduate students pursuing certification in secondary (grades six through twelve) and special (grades kindergarten through twelve) programs. Students who apply for certification after June 30, 1992, will be required to complete the course work specified in the council plan as well as to meet the minimum requirements established by the Illinois State Board of Education. The council plan incorporates the state requirements. Courses within the teaching major or minor may be used to satisfy general education requirements provided that they appear on the council list of approved courses, which is available from advisers and college offices. Students should consult with their advisers to determine the appropriate course work to satisfy the requirements. At the time of publication, all council programs leading to secondary and special certification were being revised to incorporate the council plan.

### **COUNCIL ON TEACHER EDUCATION REQUIREMENTS FOR GENERAL EDUCATION**

Students in UIUC undergraduate programs leading to secondary and special certification will be expected to complete the following requirements.

#### **DISTRIBUTION**

Communication: RHET 105 or 108, SPCOM 101 or a speech performance elective, and one writing intensive course (UIUC) with credit showing as "WRITE 200-1 hr." on transcript. Alternately, students may complete RHET 105 or 108, SPCOM 101 or a speech performance elective, and an additional rhetoric or writing course (equal to or greater than 2 hours), such as RHET 133 or RHET 143; or SPCOM 111 and 112 and an additional rhetoric or writing course (equal to or greater than 3 hours), such as RHET 133 or RHET 143.

Literature: one course

American history: one course

American government: one course



Non-Western culture: one course

One additional course chosen from literature and the arts, historical and philosophical perspectives, or social perspectives

Biological science: one course\*

Physical science: one course\*

One additional course in biological or physical science\*

Mathematics: one course

PSYCH 100 or equivalent

Health and physical development: 2 hours

---

\*One of the science courses must have a laboratory.

Individuals interested in obtaining more information on the state mandated requirements should contact the certification office of the council.

## Special Education Requirement

Section 21-2a of *The School Code of Illinois* requires that all individuals applying for teacher certification after September 1, 1981, successfully complete course work that includes "instruction on the psychology of the exceptional child, the identification of the exceptional child . . . and methods of instruction for the exceptional child, including, but not limited to, the learning disabled. . . ." Students should contact their advisers to determine the appropriate course or courses to fulfill this requirement.

## Teacher Certification Tests

Effective July 1, 1988, all applicants for certification as teachers, school administrators, and school service personnel must pass tests mandated by the Illinois State Board of Education as a condition for certification. An applicant must pass a test in basic skills (reading, writing, grammar, and mathematics) and a separate test in his or her major area. For further information, contact the certification officer of the Council on Teacher Education at (217) 333-7195.

## Application Information

Questions concerning teacher certification should be directed to the Council on Teacher Education, University of Illinois at Urbana-Champaign, 120 Education Building, 1310 South Sixth Street, Champaign, IL 61820, telephone (217) 333-7195.

Questions specific to teaching in the city of Chicago should be directed to the Department of Personnel, 1819 West Pershing Road, Chicago, IL 60609, telephone (312) 890-8262.

## Time Limit on Certification

Because certification requirements are subject to change due to new mandates from the Illinois State Teacher Certification Board and the Illinois General Assembly, the University of Illinois is not able to guarantee a recommendation for certification to anyone who applies for certification later than one year after graduation from an approved program. A student completing an approved program is urged to apply for certification during his or her last term on campus.

## Background Investigation on Applicants for Employment

Each applicant for employment in a school district in Illinois is required to authorize the employing school district to initiate a criminal background check. A school district may employ a person only after a background check has been initiated and may not knowingly employ a person who has been convicted of a felony or of attempting to commit certain offenses enumerated in *The School Code of Illinois*. Although the University of Illinois plays no role in this criminal background check, students planning to teach in Illinois should be aware of this legislated requirement.

## EDUCATIONAL PLACEMENT

The University's Educational Placement Office assists in the placement and career planning of students and alumni who are seeking education related employment in schools, colleges and universities, state and federal agencies, and other settings. Services offered include the following: (1) the storage and distribution of educational placement files for individuals who have completed at least one course in any department or college at the University of Illinois at Urbana-Champaign; (2) the publication of a weekly *Job Vacancy Bulletin*, which lists notices of more than 18,000 job vacancies sent to the office annually; (3) placement counselors who are available by appointment to provide career information and guidance to individuals and groups; (4) seminars on topics related to the job search in education; (5) a career information center offering information about careers in education; and (6) on-campus interviews with school and college recruiters from Illinois and other states. Individuals—students, faculty members, administrators, alumni, and others—seeking education related employment information are welcome to call, write, or visit the Educational Placement Office, University of Illinois at Urbana-Champaign, 140 Education Building, 1310 South Sixth Street, Champaign, IL 61820, (217) 333-0740.



**COLLEGES AND OTHER ACADEMIC UNITS**





# College of Agriculture (Including School of Human Resources and Family Studies)

104 Mumford Hall, 1301 West Gregory Drive, Urbana, IL 61801

Departments, Offices, and Curricula .....	96
School of Human Resources and Family Studies .....	97
Admission Requirements .....	97
Scholarship Information .....	97
Graduation Requirements .....	98
Statement on Academic Progress .....	98
General Education Requirements .....	98
Curricula .....	99

Situated in one of the world’s richest agricultural regions, the College of Agriculture provides an ideal setting for professional education and career preparation in the agricultural and food sciences. As the land-grant agricultural institution for the state of Illinois, the college traces its heritage of public service to the enrollment of the first agriculture student at the Illinois Industrial University in 1868. Undergraduate students in agriculture can choose from among fourteen curricula and numerous study options in eight college departments, with more than 350 courses available in a broad range of agricultural and agriculture-related disciplines. Individualized programs of study may be designed to meet the student’s particular educational needs, academic interests, and career goals.

Extensive farms, field sites, experimental and demonstration plots, greenhouses, laboratories, and other educational and research facilities are conveniently located on the Urbana-Champaign campus, affording excellent opportunities for agriculture students to gain “hands-on” experience in their particular areas of study. The college maintains a large collection of books, periodicals, audiovisuals, and other educational resources in its Agriculture Library; and microcomputers, data-processing equipment, and a campuswide mainframe computer system also are available to supplement and enrich classroom studies.

The College of Agriculture is nationally and internationally recognized for its distinguished faculty, innovative programs of study, and pioneering achievements in teaching, basic and applied research, extension education, and international agriculture. The College of Agriculture is now completing a major building program designed to enhance its position of national leadership in the agricultural and food sciences. State-of-the-art facilities currently under construction will add to its teaching and research capabilities in the plant and animal sciences, particularly in the challenging new fields of biotechnology and genetic engineering. Scheduled for completion in early 1991 are a new \$30-million Plant and Animal Biotechnology Laboratory and a \$17.5-million Animal Sciences Laboratory remodeling and addition. An ultramodern food processing pilot plant and other new laboratory facilities recently completed in the college’s Agricultural Bioprocess Laboratory, provide an outstanding environment for academic programs in food science and food engineering. Agriculture faculty members combine extensive professional background in their respective areas of specialization with additional experience in business, industry, government, and higher education.

The School of Human Resources and Family Studies, which is a major component in the College of Agriculture, offers career preparation and professional or preprofessional education in several fields of the biological, physical, and social sciences. The school traces its long history of education and public service to the establishment of the nation’s first university home economics curriculum in 1873. Undergraduate students enrolled in the school can choose from ten curricula and study options and more than 125 courses available in five program areas: foods and nutrition (to include Restaurant Management); family and consumer economics; human development and family studies; textiles and apparel; and home economics education. Excellent laboratory facilities, classrooms, computing and data-processing

equipment, and library resources are centrally located in Bevier Hall and the Child Development Laboratory, providing opportunities for both theoretical training and practical experience. The school's faculty members have received numerous recognitions and awards for outstanding achievements in education and research and are dedicated to high-quality undergraduate instruction.

## DEPARTMENTS, OFFICES, AND CURRICULA

### Agriculture

The Office of Agricultural Communications and Education offers courses in agricultural communications media and methods, information program planning, rural-urban communications, teaching of college-level agriculture, extension education, extension communications management, and other topics. Students in the agricultural communications curriculum prepare for careers in agricultural writing and editing, radio and television broadcasting, advertising and marketing communications, public relations, and photography. Students in extension education prepare for careers in the Cooperative Extension Service.

The Department of Agricultural Economics offers a core program plus specialized courses to prepare students for one or more of the following areas: agribusiness management, farm management, agricultural and food policy, agricultural finance and accounting, agricultural marketing and price analysis, commodity brokerage and the futures markets, natural resource economics and community development, international agricultural development and trade, agricultural law and taxation, and rural sociology.

The agricultural education program is offered jointly by the College of Agriculture and the College of Education. Students may follow one or more of the five specialty options—agricultural production, agricultural mechanization, agricultural supply and products, horticulture, and agricultural resources and forestry. Upon successful completion of an option in the curriculum in agricultural education, a student is qualified for an Illinois secondary teaching certificate and for employment in the Cooperative Extension Service and in many agribusiness fields.

The Department of Agricultural Engineering offers courses in agricultural engineering and agricultural mechanization, which cover the principles of engineering as applied to agriculture, including problems in the areas of soil and water control, farm buildings and housing, field machinery, tractors, crop and food processing, and farmstead mechanization. Instruction in farm shop practices and techniques is offered.

The Department of Agronomy offers courses in both crops and soils. Instruction includes courses in plant breeding and genetics; biotechnology and genetic engineering; crop evaluation; crop protection; production and evaluation of cereals, corn, soybeans, and forage crops; crop physiology; design of field experiments; weeds and their control; the origin and development of soils; land appraisals; soil conservation; soil chemistry; soil physics; soil fertility and fertilizer use; soil management; and soil microbiology. A special option in crop protection is available to students interested in a broad, comprehensive approach to controlling diseases, weeds, and insects, plus managing cultural practices to maximize yields.

The Department of Animal Sciences offers courses in the areas of animal evaluation, behavior, genetics, nutrition, physiology and meat science, and other courses related to the application of scientific principles to animal agriculture. Courses involve studies with beef and dairy cattle, horses, poultry, sheep, swine, and companion animals.

The Department of Food Science offers courses in the application of biology, engineering, chemistry, physics, microbiology, and nutrition to the processing, formulation, packaging, and distribution of food. Two undergraduate curricula, food science and food industry, are offered.

The Department of Forestry curriculum offers options in forest science and wood products. The forest science option prepares students for all phases of the management of forest properties (private or public, large or small) for the production of valuable wood products and for watershed protection, wildlife habitat, recreational enjoyment, and other benefits. The wood products option is concerned with the properties of wood as a raw material and its manufacture into useful products.

Courses in the Department of Horticulture provide instruction in floriculture, landscape horticulture, turf, pomology, vegetable crops, and subjects common to all these divisions, such as crops production, plant propagation, plant genetics, plant materials, plant anatomy and



morphology, and the physiology and ecology of horticulture plants, as well as special problems in experimental horticulture. Courses related to cultural and business management are additional offerings.

The courses offered by the Department of Plant Pathology are designed to prepare students for graduate work in plant pathology and to provide supplementary training for students specializing in related fields such as agronomy, food science, forestry, horticulture, and plant protection.

## SCHOOL OF HUMAN RESOURCES AND FAMILY STUDIES

The School of Human Resources and Family Studies is in the College of Agriculture. At the time it was established in 1974, the school incorporated the former Department of Home Economics, which had been in existence since 1874. Today, the school contains three divisions and the home economics education unit. The divisions and the programs offered by each are Consumer Sciences (consumer economics, general home economics, textiles and apparel, marketing of textiles and apparel); Foods and Nutrition (dietetics, foods and nutrition, foods in business, restaurant management); Human Development and Family Studies (human development and family studies); and Vocational Home Economics Education Unit (home economics education).

The unique focus of the school is the study, within an interdisciplinary context, of vital issues affecting the health and well-being of individuals and families. The mission of the school is to generate and provide knowledge so that people may both shape and achieve the greatest benefits from their environment under conditions of continuing social, economic, physical, biological, and technological change.

The mission is accomplished by (1) identifying critical problems of concern to individuals and families at local, state, national, and international levels; (2) generating knowledge through basic and applied research to help individuals and families live more healthy, productive, and personally satisfying lives; (3) preparing individuals for professional positions and leadership in the public and private sectors; and (4) providing educational programs to families through the Cooperative Extension Service. The school's mission is reflected in and accomplished by the teaching, research, and extension programs of its faculty in the four divisions and in the home economics education unit.

## ADMISSION REQUIREMENTS

Besides meeting the general admission requirements of the University, students entering the College of Agriculture as freshmen must have taken, prior to entry, 6 semesters of English, 4 semesters of algebra, 2 semesters of plane geometry, 4 semesters of laboratory science, and 2 semesters of social studies. (Effective with the spring 1993 semester, students must have taken, in addition to that noted above, a fourth year of English, a second year of social studies, and two years of a foreign language.)

Applicants for freshman admission are evaluated on the basis of their ACT scores and high school percentile ranks. A portion of the applicants are required to submit a Professional Interest Statement as well. Detailed information may be obtained in the *Admissions Information* brochure contained in the admission application packet.

Applicants who have earned 60 semester hours of baccalaureate credit at other institutions may be considered for transfer admission. Such applicants are evaluated on the basis of their transfer grade-point averages. Considerable variation may occur in the grade-point average required for transfer admission into the various curricula. Applicants are encouraged to consult the *Admissions Information* publication for specific grade-point average requirements.

## SCHOLARSHIP INFORMATION

The College of Agriculture recognizes entering students who have outstanding scholastic records with scholarship assistance not based on financial need. Entering freshmen are eligible to compete for \$2,500 Jonathan Baldwin Turner Scholarships. A student who ranks in the upper 10 percent of his or her high school class at the end of the junior year or who has an ACT composite score of 27 or better is encouraged to submit a scholarship application. Interviews are conducted between the junior and senior year in high school. Transfer students with the most outstanding academic records at the institutions of previous attendance are recognized

each year with \$500 transfer student scholarships. Additional information and scholarship application forms may be obtained from the Office of Resident Instruction, 104 Mumford Hall, 1301 West Gregory Drive, Urbana, IL 61801.

Additional scholarships within the college, to recognize academic merit, are awarded to continuing students based on their record earned at the University of Illinois at Urbana-Champaign. See page 60 for a description of financial assistance available based on demonstrated financial need.

## GRADUATION REQUIREMENTS

The number of hours required for graduation varies between 120 and 130 for all curricula within the college. Included in the total must be all courses prescribed in the given curriculum and a sufficient number of electives to obtain the total number. The student should consult the *Agriculture Student Handbook* or the *Human Resources and Family Studies Student Handbook* for a listing of credit restrictions that apply in evaluating elective credits toward graduation.

A student who has transferred to the University from another educational institution and who is a candidate for a Bachelor of Science degree from the College of Agriculture must complete at least half of the required agriculture or human resources and family studies semester hours in residence. A transfer student from a four-year college must also complete the senior year, not less than 30 semester hours, in residence at the University. A transfer student from a community college must complete at least 60 semester hours at a senior college and at least the last 30 semester hours at the University of Illinois at Urbana-Champaign.

Each candidate for graduation must have a grade-point average of not less than 3.0 ( $A = 5.0$ ), including grades in courses transferred from other institutions, and a grade-point average of not less than 3.0 in all courses taken at the University of Illinois at Urbana-Champaign.

## STATEMENT ON ACADEMIC PROGRESS

In addition to maintaining prescribed academic performance levels, a student in the College of Agriculture is also expected to make progress in courses required in his or her academic major. Each student is required to have at least one College of Agriculture course in the program each semester, except in cases in which the specific curriculum does not make that desirable. Students not complying will be denied additional enrollment.

## GENERAL EDUCATION REQUIREMENTS

All University students must demonstrate proficiency in the use of English (see page 76). All College of Agriculture students must complete a minimum number of hours in natural sciences, humanities, and social sciences. In many of the curricula, the requirements for these three areas are fulfilled by completing courses prescribed for the curriculum. Where specific courses are not prescribed, students select from a group of courses that have been identified by the College of Agriculture as fulfilling the requirements. Listed below are examples of departments offering courses in the various categories. The student should consult the *Agriculture Student Handbook* or the *Human Resources and Family Studies Student Handbook* for the listings of specific courses that will fulfill the College of Agriculture requirement in each area.

### Natural Sciences:

*Physical:* chemistry, geology, mathematics, physics

*Biological:* biology, microbiology, physiology

**Social Sciences:** economics, history, psychology, political science, sociology

**Humanities:** art, literature, music, philosophy

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

## Course Placement: Mathematics, Chemistry, English

All students admitted to the College of Agriculture are required to complete mathematics, chemistry, and English placement tests during the precollege testing program.



**Mathematics:** Students in a curriculum with a mathematics requirement begin in MATH 112—College Algebra unless exemption is obtained based on performance on the Mathematics Placement Test. Such students may begin in MATH 120—Calculus, MATH 124—Finite Mathematics, or MATH 125—Linear Algebra.

**Chemistry:** To take CHEM 101, a student must have a satisfactory score on the Chemistry Placement Test and an exemption from, or credit in, MATH 112; students who have not had high school chemistry or who do not score high enough on the Chemistry Placement Test must take CHEM 100 before taking CHEM 101.

**English:** Minimum English requirements in most College of Agriculture curricula include a semester of composition and a semester of public speaking. Students may fulfill the requirements by completing RHET 105—Principles of Composition and SPCOM 101—Principles of Effective Speaking; or SPCOM 111 and 112—Verbal Communication.

**Curricula**  
**CORE CURRICULUM IN AGRICULTURE**

**For the Degree of Bachelor of Science in Agriculture**

This is a core curriculum in that it provides for a common core program for the first two years. A student who desires an agriculture curriculum but is uncertain as to a specific major is encouraged to select this curriculum. All core curriculum students must select majors by the start of the junior year. The core curriculum is similar to the first two years of the program for students majoring in agricultural economics, agricultural mechanization, agronomy, animal sciences, general agriculture, and horticulture. A student interested in a specialized agriculture curriculum (see pages 106 through 117) is encouraged to enter directly into that program as a freshman.

The core program includes a foundation of general education courses. In addition, the student must choose from among several introductory agriculture courses. These are used to fulfill a graduation requirement but also provide an excellent opportunity for the student to explore the various curricular options within the college in preparation for selecting a specific major.

Upon completion of all requirements of this curriculum, with an approved major and a minimum of 126 hours of credit, the student is awarded the degree of Bachelor of Science in agriculture.

Prescribed Courses	HOURS
RHET 105 or 108—Composition (see English course placement listing, page 99) .....	4
SPCOM 101—Principles of Effective Speaking .....	3
AGR 100—Agriculture in Modern Society <sup>1</sup> .....	1
Agriculture core courses: three as listed below, and as required for student's major .....	9-10
Biological sciences: two or more of the following areas, as required by the student's major:	
PLBIO 100—Plant Biology; or MCBIO 100—Introductory Microbiology, and	
MCBIO 101-- Introductory Experimental Microbiology; or BIOL 104—Animal Biology .....	8-9
CHEM 101—General Chemistry (see chemistry course placement listing, page 99) .....	4
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies <sup>2</sup> .....	4
MATH 112—College Algebra, or exemption by Mathematics Placement Test .....	3
MATH 114—Plane Trigonometry, or MATH 124—Introductory Analysis for Social Scientists;	
and MATH 125—Linear Algebra; as recommended by individual curriculum .....	4
ECON 101—Introduction to Economics .....	4
Social sciences courses (see page 98) .....	6
Humanities courses (see page 98) .....	6

<sup>1</sup>AGR 100—Agriculture in Modern Society (1 hour) is required for entering freshmen only. Transfer students are exempt.  
<sup>2</sup>Agriculture economics students substitute MATH 134—Calculus for Social Scientists I for Chemistry 102 or 103.

**Agriculture Core Courses**  
In addition to AGR 100, one course from each of three of the four areas listed below must be completed by each student in this curriculum.

	HOURS
Agricultural economics	
AG EC 100—Introductory Agriculture Economics .....	3
Agricultural mechanization and food science	
AG M 100—Engineering Applications in Agriculture; FS 101—Food in Modern Society .....	3
Animal sciences	
AN S 100—Introduction to Animal Sciences .....	4
Plant and soil sciences	
SOILS 101—Introductory SOILS; AGRON 121—Principles of Field Crop Science; FOR 101—Introduction to Forestry; HORT 100—Introductory Horticulture .....	3-4

First-Year Program

Courses must be chosen from those listed on pages 98-99 and must include one agriculture core course each semester in addition to AGR 100.

FIRST YEAR		FIRST YEAR	
FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1	Agriculture core course .....	3-4
Agriculture core course .....	3-4	Biological sciences .....	4-5
Biological science .....	4	Chemistry .....	4
Mathematics or chemistry .....	2-5	SPCOM 101—Principles of Effective Speaking ..	3
RHET 105—Composition .....	4	Total .....	14-16
Total .....	14-18		

SECOND YEAR

The student will, in consultation with an adviser, select from those courses listed as prescribed and appropriate to his or her intended major in this curriculum.

THIRD AND FOURTH YEARS

For the third and fourth years, see the requirements of the approved major. In addition to the prescribed courses listed above, the requirements include completion of: (1) all prescribed courses listed for the major, (2) additional courses as required to total 40 hours in agriculture, and (3) sufficient open electives to bring the total hours to 126.

Major in Agricultural Economics

This curriculum is designed for students preparing for employment in positions involving economic and social decision making in agricultural and related occupations. Concentration in areas of career preparation is possible by selection of course alternatives within required groups of courses and in elective courses. Examples of concentration areas are: agribusiness management, agricultural finance, agricultural marketing and price analysis, farm management, international agricultural development, natural resource economics, agricultural and food policy, and rural sociology. These interest areas are not mutually exclusive, and they may be combined in many ways to fit the needs and interests of the student. Course selections recommended for these concentration areas are given in the *Agriculture Student Handbook*.

A large number of courses offered by the College of Commerce and Business Administration are recommended for students in specific agricultural economics concentrations. Two special programs are available for students with specific business interests: in 1) the agricultural economics/accountancy program in which the agricultural economics graduate is eligible to sit for the certified public accountant examination at the end of the undergraduate degree; and 2) the five-year B.S. in agriculture/M.B.A. degree program. Information on both programs is available from the Department of Agricultural Economics.

Upon completion of the curriculum requirements and a minimum of 126 hours of credit, the student is eligible for the degree of Bachelor of Science in agriculture.

CURRICULUM REQUIREMENTS	HOURS
RHET 105 or 108—Composition .....	4
SPCOM 101—Principles of Effective Speaking .....	3
B&TW 251—Business and Administrative Communication, or B&TW 271—Sales Writing, or B&TW 272—Report Writing, or RHET 133—Principles of Composition .....	3
MATH 112—College Algebra .....	3
MATH 125—Elementary Linear Algebra with Applications, or MATH 124—Finite Mathematics .....	3



MATH 134—Calculus for Social Scientists I, or MATH 120—Calculus and Analytic Geometry I .....	4-5
AG EC 161—Microcomputers in Agriculture, or CS 103, CS 105, or CS 106—Introduction to Computers and Their Applications .....	3
AG EC 261—Agricultural Economic Statistics, or ECON 172—Economic Statistics I and ECON 173—Economic Statistics II .....	4-6
ACCY 201—Principles of Accounting I .....	3
AGR 100—Agriculture in Modern Society .....	1
AG EC 100—Introductory Agricultural Economics .....	3
Agriculture core courses—two as listed below .....	6-8
CHEM 101 and one other natural science course listed below .....	8-10
Social sciences courses—At least 16 hours from at least two departments, including ECON 101—Introduction to Economics, ECON 300—Intermediate Microeconomic Theory, or ECON 301—Intermediate Macroeconomic Theory .....	16
Humanities courses .....	6
Agriculture courses—Total of 35 hours, including at least 20 hours of agricultural economics <sup>1</sup> .....	35
Open electives .....	29-34 <sup>2</sup>

<sup>1</sup>AGR 100, AG EC 100, and two agriculture core courses count toward this requirement.  
<sup>2</sup>Depending upon choice of courses from prescribed alternatives.

**Agriculture Core Courses**

- AG M 100—Engineering Applications to Agriculture, or FS 101—Food in Modern Society
- AGRON 121—Principles of Field Crop Science, or FOR 101—Introduction to Forestry, or  
HORT 100—Introduction to Horticulture, or SOILS 101—Introductory Soils
- AN S 100—Introduction to Animal Sciences

**Natural Science Courses**

- BIOL 104—Animal Biology
- CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies
- GEOL 101—An Introduction to the Study of the Earth, or GEOL 107—General Geology I
- MCBIO 100—Introductory Microbiology, and MCBIO 101—Introductory Experimental Microbiology
- PLBIO 100—Plant Biology
- PHYS 101—General Physics

**Major in Agricultural Mechanization—Industrial Option**

This curriculum is for students who desire emphasis in the areas of farm structures, conserva-  
tion, farm power, and farm machinery, in preparation for work with service organizations,  
retail dealers, power suppliers, contractors, and farm management companies.  
For common core requirements, see Core Curriculum in Agriculture on page 99. Other  
courses required for this major are:

**HOURS**

Prescribed courses in agriculture:	
AG EC 100—Introductory Agricultural Economics, or AN S 100—Introduction to Animal Sciences .....	3-4
AG EC 220—Farm Management .....	3-4
AG M 100—Engineering Applications in Agriculture .....	3
AG M 299—Agricultural Mechanization Seminar .....	1
AG M 331—Farm Machinery Technology .....	3
SOILS 101—Introductory SOILS .....	4
AGRON 121—Principles of Field Crop Science .....	4
15 hours from the following:	
AG M 200—Agricultural Mechanics Shop: Construction Technology; AG M 202—Welding Processes, Metallurgy, and Materials; AG M 203—Electric Wiring, Motors, and Controls; AG M 221—Farm Power and Machinery Management; AG M 241—Farm Tractor Power; AG M 250—Internship; AG M 252— Mechanics of Soil and Water Conservation; AG M 271—Engineering Applications in Residential Housing; AG M 272—Farm Buildings; AG M 281—Grain Drying, Handling, and Storage; AG M 300—Special Problems; AG M 333—Agricultural Chemical Application Systems; AG M 372—Livestock Waste Management; AG M 381—Electro-Mechanical Agricultural Systems .....	40
Elective courses in agriculture to bring total agriculture courses to a minimum of .....	40
Humanities (see page 98) .....	6
Social sciences: a minimum of 9 hours from two departments (see page 98), including ECON 101—Introduction to Economics .....	9
Other prescribed courses:	

ACCY 200—Fundamentals of Accounting, or ACCY 201—Principles of Accounting I .....	3
AG EC 161—Microcomputers in Agriculture, or CS 105 or 106—Computer Science .....	3
MATH 114—Plane Trigonometry .....	2
PHYCS 101—General Physics (Mechanics, Heat and Sound) .....	5
PHYCS 102—General Physics (Light, Electricity, and Magnetism), if CHEM 102 is not taken .....	5
12 hours from the following:	
AG EC 302—Agricultural Finance; AG EC 305—Agricultural Policies and Programs; AG EC 338— Agribusiness Management; B ADM 202—Principles of Marketing; B ADM 210—Management and Organizational Behavior; B ADM 247—Introduction to Management, PSYCH 245—Industrial Organiza- tional Psychology; B ADM 261—Summary of Business Law; B ADM 321—Industrial Social Systems; B&TW 271—Sales Writing; SPCOM 211—Business and Professional Speaking; Fin. 254—Introduction to Business Financial Management .....	3-4
A course in statistics <sup>1</sup> .....	3
Written communications elective <sup>2</sup> .....	126
Core courses and open electives to bring total hours to .....	

<sup>1</sup>Chosen from STAT 100, PSYCH 233, AG EC 261, ECON 171, 172.  
<sup>2</sup>Chosen from AGCOM 114; B&TW 251, 252, 272, 302; RHET 133, 143.

Major in Agricultural Mechanization—Equipment Operations Option

This option is for students who desire to specialize in the problems of equipment and plant operations. Graduates work as managers for large-scale operations as contractors, confinement livestock housing operators, processing plant operators, field foremen for corporation farms, or farm operators.

For common core requirements of this major, see page 99. Other courses required for this major are:

	<b>HOURS</b>
Prescribed courses in agriculture:	
AG M 100—Engineering Applications in Agriculture .....	3
AG M 221—Farm Power and Machinery Management .....	4
AG M 299—Seminar .....	1
AG EC 100—Introductory Agricultural Economics or AN S 100—Introduction to Animal Sciences .....	3-4
AG EC 220—Farm Management .....	3-4
SOILS 101—Introductory SOILS .....	4
AGRON 121—Principles of Field Crop Science .....	4
12 hours from the following agricultural mechanization courses:	
AG M 200—Agricultural Mechanization Shop: Construction Technology; AG M 202—Welding Processes, Metallurgy, and Materials; AG M 203—Electric Wiring, Motors, and Controls; AG M 241—Farm Tractor Power; AG M 250—Internship; AG M 252—Mechanics of Soil and Water Conservation; AG M 271— Engineering Applications in Residential Housing; AG M 272—Farm Buildings; AG M 281—Grain Drying, Handling, and Storage; AG M 300—Special Problems; AG M 331—Farm Machinery Technology; AG M 333—Agricultural Chemical Application Systems; AG M 372—Livestock Waste Management; AG M 381—Electro-Mechanical Agricultural Systems .....	
12 hours from the following production and management courses:	
AG EC 203—Farm Taxation; AG EC 230—Marketing of Agricultural Products; AG EC 302—Agricultural Finance; AG EC 303—Agricultural Law; AG EC 312—Rural Real Estate Appraisal; AG EC 324—Decision Making for Farm Operators; SOILS 303—Soil Fertility and Fertilizers; SOILS 304—Soil Management and Conservation; AGRON 318—Crop Growth and Production; AGRON 322—Forage Crops and Pastures; AN S 307—Environmental Aspects of Animal Management; HORT 242—Vegetable Crop Production .....	
Agriculture hours must total a minimum of .....	40
Humanities (see page 98) .....	6
Social sciences: a minimum of 9 hours in the social sciences from two departments, including ECON 101—Introduction to Economics (see page 98) .....	9
Other prescribed courses:	
ACCY 200—Fundamentals of Accounting, or ACCY 201—Principles of Accounting I .....	3
AG EC 161—Microcomputers in Agriculture, or CS 105 or 106—Computer Science .....	3
Math 114—Plane Trigonometry (unless exempt by Mathematics Placement Test) .....	2
PHYCS 101—General Physics (Mechanics, Heat, and Sound) .....	5
PHYCS 102—General Physics: Light, Electricity, and Magnetism, if CHEM 102 or 103 is not taken .....	5
A course in statistics <sup>1</sup> .....	3-4
Written communications elective <sup>2</sup> .....	3
Core courses and open electives to bring total hours to .....	126



<sup>1</sup>Chosen from STAT 100, PSYCH 233, AG EC 261, ECON 171, 172.  
<sup>2</sup>Chosen from AGCOM 114; B&TW 251, 252, 272, 302; RHET 133, 143.

Major in Agronomy

Students wishing to major in agronomy select one of four specializations: crops, soils, agronomy, crop protection. For those who may later desire to pursue graduate work, adequate training may be obtained by the suitable choice of electives within the framework of this major or in the agricultural science or soil science curricula. Numerous employment opportunities exist in various agricultural industries for students who wish to complement their agronomy major with elective courses in agricultural economics and business.

For common core requirements of this major, see page 99. Other courses required for this major are:

	HOURS
Prescribed courses in agriculture:	
SOILS 101—Introductory Soils .....	4
AGRON 121—Principles of Field Crop Science .....	4
AGRON 290—Undergraduate Agronomy Seminar .....	1
Elective courses in agronomy <sup>1</sup> .....	18

<sup>1</sup>CROPS option requires 12 hours from agronomy-crops and 6 hours from agronomy-soils. SOILS option requires 12 hours from agronomy-soils and 6 hours from agronomy-crops. AGRONOMY option requires 18 hours of agronomy, with a minimum of 6 hours each from crops and soils. CROP PROTECTION requires all courses as specified.

CROPS:	
AGRON 220—Plant and Animal Genetics .....	4
AGRON 318—Crop Growth and Production .....	3
AGRON 319—Environment and Plant Ecosystems .....	3
AGRON 322—Forage Crops and Pastures .....	3
AGRON 323—Principles of Plant Breeding .....	4
AGRON 326—Weeds and Their Control .....	3
AGRON 330—Plant Physiology .....	3
AGRON 336—Perennial Grass Ecosystems .....	3
AGRON 350—Crops and Man .....	3
SOILS:	
SOILS 301—Soil Survey with Emphasis on Illinois Soils .....	3
SOILS 302—Soil Testing Practicum .....	2-3
SOILS 303—Soil Fertility .....	3
SOILS 304—Soil Management and Conservation .....	3
SOILS 305—Biochemical Processes in Soil and Water Environment .....	3
SOILS 307—Soil Chemistry .....	3
SOILS 308—Physics of the Plant Environment .....	4
SOILS 311—Laboratory Method for Soils Analysis .....	3
SOILS 313—Soil Mineral Analysis .....	4
CROP PROTECTION:	
AGRON 220—Plant and Animal Genetics, or AGRON 330—Plant Physiology .....	3-4
SOILS 301—Soil Survey with Emphasis on Illinois Soils, or Soils 303—Soil Fertility and Fertilizers .....	3
AGRON 326—Weeds and Their Control .....	3
HORT 100—Introductory Horticulture .....	3
HORT 242—Vegetable Crop Production, or HORT 261—Small Fruit and Viticulture Science, or HORT 262—Tree Fruit Science .....	3
PL PA 204—Introductory Plant Pathology .....	3
PL PA 305—Plant Disease Development and Control, or PL PA 377—Diseases of Field Crops .....	3
Elective courses in agriculture to bring total agriculture courses to a minimum of .....	40
Humanities (see page 98) .....	6
Social sciences: minimum of 9 hours from two departments including ECON 101—Introduction to Economics (see page 98) .....	9

Other prescribed courses:

GEOL 101—An Introduction to the Study of the Earth, or GEOL 107—General Geology I (all options) .. 4

Crop protection only:

CHEM 131—Elementary Organic Chemistry, and CHEM 134—Elementary Organic Chemistry

Laboratory ..... 5

ENTOM 120—Introductory Applied Entomology ..... 3

ENTOM 319—Fundamentals of Insect Control ..... 4

Written communications elective<sup>2</sup> ..... 3

Core courses and open electives to bring total hours to ..... 126

<sup>2</sup>Chosen from AGCOM 114; B&TW 251, 252, 272.

## Major in Animal Sciences

The management option in animal sciences is designed for the student intending to pursue a career in animal management or in one of the associated industries upon completion of the undergraduate degree. It emphasizes the scientific disciplines involved in animal production and includes business courses. Students complete requirements in one of several specializations. The science option is designed for the student interested in graduate or professional training or in a technical position after receiving the undergraduate degree. It is intended to satisfy most of the entrance requirements to postgraduate programs, but students should consult the entrance requirements of specific programs they intend to pursue.

### MANAGEMENT OPTION

### HOURS

Prescribed courses in agriculture:

AN S 100—Introduction to Animal Sciences ..... 4

AN S 202—Domestic Animal Physiology ..... 4

AN S 220—Plant and Animal Genetics ..... 4

AN S 221—Animal Nutrition ..... 4

AN S 250 or 299—Animal Sciences Internship or Animal Management Field Studies ..... 1

AN S 298—Undergraduate Seminar ..... 1

Students select one of the following specializations (12-16 hours):

Beef: AN S 119—Meat Technology; AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth; AN S 301—Beef Production; AN S 305—Genetics and Animal Improvement

Companion Animals: AN S 206—Light Horse Management; AN S 207—Companion Animal Management; AN S 231—Comparative Physiology of Reproduction, Lactation and Growth; AN S 305—Genetics and Animal Improvement

Dairy: AN S 201—Principles of Dairy Production; AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth; AN S 300—Dairy Herd Management; AN S 305—Genetics and Animal Improvement; AN S 308—Physiology of Lactation

Poultry: AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth; AN S 304—Poultry Management; AN S 305—Genetics and Animal Improvement; AN S 307—Environmental Aspects of Animal Management

Sheep: AN S 119—Meat Technology, or AN S 209—Meat Animal and Carcass Evaluation; AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth; AN S 302—Sheep Science; AN S 305—Genetics and Animal Improvement

Swine: AN S 119—Meat Technology, or AN S 209—Meat Animal and Carcass Evaluation; AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth; AN S 303—Pork Production; AN S 305—Genetics and Animal Improvement

Meats: AN S 119—Meat Technology; AN S 209—Meat Animal and Carcass Evaluation; AN S 309—Meat Science; AG EC 330—Economics of Commodity Marketing; AN S 201—Principles of Dairy Production, or AN S 301—Beef Production, or AN S 302—Sheep Science, or AN S 303—Pork Production, or AN S 304—Poultry Management

Agriculture core courses and elective courses in agriculture to bring total agriculture courses to a minimum of ..... 40

CHEM 131—Organic Chemistry, or AN S 290—Introduction to Metabolism in Domestic Animals ..... 3

AG EC 161—Microcomputers in Agriculture, or an introductory computer science course ..... 3

AG EC 220—Farm Management, Acc. 200—Fundamentals of Accounting, or Acc. 201—Principles of Accounting I ..... 3-4

Written communications elective<sup>1</sup> ..... 3

Core courses (see page 99) and open electives to bring total hours to ..... 126



SCIENCE OPTION	HOURS
Prescribed courses in animal sciences:	
AN S 100—Introduction to Animal Sciences .....	4
AN S 202—Domestic Animal Physiology .....	4
AN S 220—Plant and Animal Genetics .....	4
AN S 221—Animal Nutrition .....	4
AN S 231—Comparative Physiology of Reproduction, Lactation, and Growth .....	3
AN S 298—Undergraduate Seminar .....	1
Four courses chosen from:	
AN S 203—Behavior of Domestic Animals, or AN S 346—Animal Behavior; AN S 305—Genetics and Animal Improvement; AN S 307—Environmental Aspects of Animal Management; AN S 308—Physiology of Lactation; AN S 309—Meat Science; AN S 310—Genetics of Domestic Animals; AN S 316—Population Genetics; AN S 317—Quantitative Genetics; AN S 320—Nutrition and Digestive Physiology of Ruminants; AN S 331—Physiology of Reproduction in Domestic Animals; AN S 345—Statistical Methods; AN S 347—Animal Behavior Laboratory; AN S 350—World Animal Agriculture; AN S 385—Gastrointestinal and Methanogenic Microbial Fermentations; AG EC 330—Economics of Commodity Marketing	
One course chosen from:	
AN S 119—Meat Technology; AN S 201—Principles of Dairy Production; AN S 206—Light Horse Management; AN S 207—Companion Animal Management; AN S 209—Meat Animal and Carcass Evaluation; AN S 300—Dairy Herd Management; AN S 301—Beef Production; AN S 302—Sheep Science; AN S 303—Pork Production; AN S 304—Poultry Management	
Agriculture core courses and elective courses in agriculture to bring total agriculture courses to a minimum of .....	40
CS 101, 103, 105, 106, or equivalent .....	3
Written communication elective <sup>1</sup> .....	3
Five courses from the following with at least two of the first three:	
PLBIO 100—Plant Biology; BIOL 104—Animal Biology <sup>2</sup> ; MCBIO 100—Introductory Microbiology, and MCBIO 101—Introductory Experimental Microbiology; CHEM 131—Elementary Organic Chemistry, and CHEM 134—Elementary Organic Chemistry Laboratory; BIOCH 350—Introductory Biochemistry, or AN S 290—Introduction to Metabolism in Domestic Animals; Math 114—Plane Trigonometry; Math 120—Calculus and Analytic Geometry I, or MATH 135—Calculus; PHYCS 101—General Physics (Mechanics, Heat, and Sound); STAT 100—Statistics or AN S 340—Introduction to Applied Statistics	
Core courses (see page 99) and open electives to bring total hours to .....	126

<sup>1</sup>Chosen from AGCOM 114; B&TW 251, 252, 272, 302; RHET 133, 143.

<sup>2</sup>BIOL 110 and 111 may be substituted for PLBIO 100 and BIOL 104.

## Major in General Agriculture

This major is for students who are interested in a broad basic training in agriculture, rather than in specialization within a departmental field of work. Areas for which such training is suited include production agriculture, agricultural extension, agricultural services, and others.

Students should refer to *Agriculture Student Handbook* for suggested courses and programs of study for training in these areas within this major.

For common core requirements of this major, see page 99. Other courses required for this major are:

	HOURS
Prescribed course in agriculture:	
SOILS 101—Introductory Soils .....	4
In addition to core courses in agriculture, at least 3 hours of credit in each of the following departments: agricultural economics, agricultural engineering (agricultural mechanization), agronomy (in addition to SOILS 101), animal sciences, horticulture .....	18
Elective courses in agriculture to bring total agriculture courses to a minimum of .....	50
Humanities (see page 98) .....	6
Social sciences: a minimum of 9 hours from two departments including ECON 101—Introduction to Economics (see page 98) .....	9
Written communication elective <sup>1</sup> .....	3
Core courses and open electives to bring total hours to .....	126

<sup>1</sup>Chosen from AGCOM 114, B&TW 251, 252, 272, 302; RHET 133 and 143.

Major in Horticulture

This major is for students who desire a basic general knowledge of horticulture. Emphasis is placed on the basic plant sciences to give a general background for the specialized phases of horticulture, particularly those concerned with the production of food crops, such as fruits and vegetables for fresh market and processing.

Students who are interested in ornamental plants should consult the ornamental horticulture curriculum (see page 116).

For common core requirements, see page 99. Other courses required in this major are:

HOURS

Prescribed courses in agriculture:	
AG M 100—Engineering Applications in Agriculture .....	3
SOILS 101—Introductory Soils .....	4
ENTOM 120—Introduction to Applied Entomology .....	3
FS 101—Food in Modern Society .....	3
HORT 100—Introduction to Horticulture .....	3
HORT 220—Plant and Animal Genetics .....	4
HORT 221—Plant Propagation .....	3
HORT 242—Commercial Vegetable Production .....	3
HORT 261—Small Fruit and Viticulture Science .....	3
HORT 262—Tree Fruit Science .....	3
HORT 321—Floricultural Physiology, or HORT 345—Growth and Development of Horticultural Crops ...	4
PL PA 204—Introductory Plant Pathology .....	3
Additional horticulture courses, except HORT 125—Survey of Landscape Horticulture, HORT 190—Home Vegetable Gardening, and HORT 233—Floriculture for the Home .....	6
Elective courses in agriculture to bring total agriculture courses to a minimum of .....	40
Humanities and social sciences: an approved 6 hours in the humanities; a minimum of 9 hours from two departments in the social sciences, including ECON 101—Introduction to Economics .....	15
Other prescribed courses:	
PLBIO 234—Form and Function of Flowering Plants .....	3
Core courses and open electives to bring total hours to .....	126

CURRICULUM IN AGRICULTURAL COMMUNICATIONS

For the Degree of Bachelor of Science in Agriculture

This curriculum is designed for students who wish to pursue careers in the combined fields of agriculture and communications. It seeks to prepare them for work as professionals in agricultural writing, editing, and publishing; public relations; advertising; radio and television broadcasting; photography; and related activities. The College of Agriculture and the College of Communications offer this curriculum cooperatively. It allows the planning of study programs closely related to the student’s interests in one of three communications options: news-editorial, advertising, broadcast journalism.

Upon completion of the curriculum requirements and a minimum of 126 hours of credit, the student is awarded the degree of Bachelor of Science in agriculture.

FIRST YEAR

FIRST SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1
AGCOM 110—Introduction to Agricultural Communications .....	1
Agriculture core course (see page 99) .....	3
Biological sciences course <sup>1</sup> .....	4-5
MATH 112—College Algebra, or exemption .....	3
RHET 105 or 108—Composition (see English course placement section, page 99) .....	3-4
Total .....	15-16

FIRST YEAR

SECOND SEMESTER	HOURS
Agriculture core course .....	3-4
CHEM 100—Introductory Chemistry, or exemption .....	2
SPCOM 101—Principles of Effective Speaking ..	3
Biological science course .....	4-5
Elective .....	2-3
Total .....	15-17



SECOND YEAR FIRST SEMESTER	HOURS
Agriculture core course .....	3-4
AGCOM 114—Agricultural Communications Media and Methods <sup>2</sup> .....	3
ECON 101—Introduction to Economics .....	4
Physical sciences <sup>3</sup> .....	3-4
Social sciences <sup>4</sup> .....	3
Total .....	16-18

SECOND YEAR SECOND SEMESTER	HOURS
Agriculture elective .....	3
AGCOM 214—Agricultural Communications Strategy .....	3
Humanities course (see page 98) .....	3
Social sciences course .....	3

<sup>1</sup>Two of the following are required in this curriculum: PLBIO 100—Plant Biology; BIOL 104—Animal Biology; MCBIO 100 and 101—Introductory Microbiology and Introductory Experimental Microbiology.

<sup>2</sup>A minimum of 35 hours of agriculture courses is required, including AGCOM 310—Information for Agriculture; and AGCOM 290—Professional Seminar. At least 10 of the 35 hours must be in agriculture electives other than agricultural communications, with at least 8 hours at the 200-300 level.

<sup>3</sup>A minimum of 10 hours is required from astronomy, atmospheric sciences, chemistry, computer science, geology, mathematics, physics, or specified statistics courses. MATH 112 and CHEM 100 cannot be included in the 10 hours.

<sup>4</sup>A minimum of 15 hours is required, including ECON 101— Introduction to Economics, PSYCH 100— Introduction to Psychology, and POL S 150—American Government.

### THIRD AND FOURTH YEARS

Students complete requirements in the agriculture, physical sciences, social sciences, and humanities areas along with a minimum 20-hour communications requirement selected from one of the following options:

Advertising Option	HOURS
ADV 281—Introduction to Advertising .....	3
ADV 381—Advertising Research Methods .....	3
ADV 382—Advertising Creative Strategy and Tactics .....	3
ADV 383—Advertising Media Strategy and Tactics .....	3
ADV 391—Advertising Management: Planning .....	3
ADV 392—Advertising Management: Strategy and Tactics .....	3
Electives in communications to complete the 20-hour requirement.	

News-Editorial Option	HOURS
JOURN 350—Reporting I .....	4
JOURN 360—Graphic Arts .....	4
JOURN 370—News Editing .....	4

One course from the following:

JOURN 217—History of Communications, JOURN 218— Communications and Public Opinion, JOURN 220—Communications and Popular Culture, JOURN 231—Mass Communication in a Democratic Society, JOURN 241—Law and Communications, JOURN 251—Social Aspects of Mass Communications

One course from the following:

JOURN 326—Magazine Article Writing, JOURN 330—Magazine Editing, JOURN 372—Broadcast Newswriting and Gathering, JOURN 380—Reporting II

Electives in communications to complete the 20-hour requirement

Broadcast Journalism Option	HOURS
JOURN 241—Law and Communications .....	3
JOURN 350—Reporting I .....	4
JOURN 362—Broadcast News Production .....	4
JOURN 372—Broadcast Newswriting and Gathering .....	4
JOURN 382—Broadcast News Editing .....	4
Electives in communications to complete the 20-hour requirement	

## CURRICULUM IN AGRICULTURAL ENGINEERING

### For the Degree of Bachelor of Science in Agricultural Engineering

This curriculum, outlined on page 187, is administered in the College of Engineering. Requirements for the first year are the same as in other engineering curricula. Courses in agricultural engineering begin in the third semester. In the third year, the student chooses technical electives for specialization in one of the following: processing, structures and environment, power and machinery, soil and water. A specialization in food engineering is also available (see page 189).

### For the Degrees of Bachelor of Science in Agricultural Engineering, and Bachelor of Science in Agriculture

Students may obtain bachelor's degrees in both agricultural engineering and agriculture in five years by choosing the curriculum in agricultural science, Option 3, on page 111. Students following the five-year program enroll in the College of Agriculture for their first three years of work and then transfer to the College of Engineering for the last two years.

## CURRICULUM IN AGRICULTURAL EDUCATION

### For the Degree of Bachelor of Science in Agriculture

The purpose of this curriculum is to prepare students to teach agriculture in secondary schools and community colleges, and to work in the Cooperative Extension Service and in many agribusiness areas. In addition to the training outlined in this curriculum, a minimum of one year or 2,000 hours of employment experience in agriculture is required for certification in Illinois as a secondary school agriculture instructor. A minimum of 130 hours of credit is required for graduation in this curriculum. For teacher education requirements applicable to all curricula, see the chapter on Teacher Education beginning on page 87. Students are also advised that general education requirements are being revised to comply with new state mandates. For more information, consult the certification officer (120 Education Building).

## General Education Requirements

### COMMUNICATIONS

#### HOURS

SPCOM 111 and 112; or RHET 105 or 108, and SPCOM 101 .....	6-7
Additional writing course <sup>1</sup> .....	3

### NATURAL SCIENCES

#### HOURS

BIOL 104—Animal Biology .....	4
PLBIO 100—Plant Biology .....	4
CHEM 101, and CHEM 102 or 103—General Chemistry including Organic .....	8
Mathematics <sup>1</sup> .....	3
Total .....	19

### HUMANITIES<sup>1</sup>

#### HOURS

Total to include one course each in American history, English or American literature, and non-Western culture .....	15-16
---	-------

### SOCIAL SCIENCES<sup>1</sup>

#### HOURS

POL S 150—American Government: Organization and Powers .....	3
PSYCH 100—General Psychology .....	4
Electives .....	3

HEALTH/PHYSICAL DEVELOPMENT <sup>1</sup> .....	2
--	---

### Professional Education Courses

#### HOURS

ED PSY 211—Educational Psychology .....	3
ED PR 150—School and Community Experiences .....	2
EPS 201—Foundations of American Education .....	3
VO TEC 101—Nature of the Teaching Profession .....	2
VO TEC 240—Principles of Vocational and Technical Education .....	2
VO TEC 275—Pre-Student Teaching in Agricultural Education .....	2-3
VO TEC 276—Student Teaching in Vocational Agriculture .....	8
VO TEC 277—Programs and Procedures in Agricultural Education .....	5
VO TEC 309—Vocational Education for Special Needs Learners .....	2-4
Total .....	29-32

<sup>1</sup>Courses chosen from Council on Teacher Education—approved list; pending final approval.



**Prescribed Courses in Agriculture**

<b>CORE COURSES</b>	<b>HOURS</b>
AGR 100—Agriculture in Modern Society .....	1
AG EC 100—Introductory Agricultural Economics .....	3
AG M 100—Engineering Applications in Agriculture, or AG M 200—Agricultural Mechanics Shop: Construction Technology .....	3
SOILS 101—Introductory Soils .....	4
Total .....	11

**Approved Options**

Each student must select one of the following five options. The prescribed agriculture courses and elective agriculture courses must total 40 hours, including the 11 hours listed above, and must include a minimum of 20 hours of 200- and 300-level courses. .... 29

<b>AGRICULTURAL PRODUCTION OPTION</b>	<b>HOURS</b>
AG EC 220—Farm Management .....	3-4
AG EC 230—Marketing of Agricultural Products, or agricultural economics elective 300-level course .....	3
AG M 202—Welding Processes, Metallurgy, and Materials or AG M 203—Electric Wiring, Motors, and Control .....	3
Agricultural mechanization elective 200-level course .....	3-4
AGRON 121—Principles of Field Crop Science .....	4
AN S 221—Animal Nutrition .....	4
Animal sciences elective .....	3
HORT 100—Introductory Horticulture .....	3

<b>AGRICULTURAL SUPPLY AND PRODUCTS OPTION</b>	<b>HOURS</b>
AG EC 220—Farm Management .....	3-4
AG EC 230—Marketing of Agricultural Products .....	3
AG EC 338—Agribusiness Management .....	3
AG M 202—Welding Processes, Metallurgy, and Materials, or AG M 203—Electric Wiring, Motors, and Control .....	3
AGRON 121—Principles of Field Crop Science .....	4
SOILS 303—Soil Fertility and Fertilizers, or AGRON 326—Weeds and Their Control .....	3
AN S 221—Animal Nutrition .....	4
HORT 225—Ornamental Gardening, or HORT 233—Floriculture for the Home .....	3
Nonagriculture course:	
ACCY 200—Fundamentals of Accounting, or ACCY 201—Principles of Accounting I .....	3

<b>AGRICULTURAL MECHANIZATION OPTION</b>	<b>HOURS</b>
AG M 200—Agricultural Mechanics Shop: Construction Technology .....	3
AG M 202—Welding Processes, Metallurgy, and Materials .....	3
AG M 203—Electric Wiring, Motors, and Control .....	3
Agricultural mechanization electives—200- and 300-level courses excluding AG M 361 .....	10
HORT 100—Introductory Horticulture .....	3
AN S 100—Introduction to Animal Sciences, or AN S 207— Companion Animal Management .....	3-4

<b>HORTICULTURE OPTION</b>	<b>HOURS</b>
AN S 100—Introduction to Animal Sciences, or AN S 207— Companion Animal Management .....	3-4
ENTOM 120—Introduction to Applied Entomology .....	3
HORT 100—Introductory Horticulture .....	3
PL PA 204—Introductory Plant Pathology .....	3
9 hours from: HORT 201, 202, 221, 226, 233, 236, 242, 251, 261, 262 .....	9

<b>AGRICULTURAL RESOURCES AND FORESTRY OPTION</b>	<b>HOURS</b>
SOILS 304—Soil Management and Conservation .....	3
AN S 100—Introduction to Animal Sciences or AN S 207— Companion Animal Management .....	3-4
ENTOM 120—Introduction to Applied Entomology .....	3
FOR 101—Introduction to Forestry .....	3
FOR 220—Dendrology .....	4
FOR 260—Forest Land Policy and Administration, FOR 319— Environment and Plant Ecosystems, or FOR 351—Forest Resource Economics .....	3
HORT 100—Introductory Horticulture .....	3
R SOC 270—Population Issues, or R SOC 277—The Social Context of Agriculture .....	3

CURRICULUM IN AGRICULTURAL SCIENCE

For the Degree of Bachelor of Science in Agriculture

This curriculum is especially designed for the student who plans to do graduate study in an agricultural field or who wishes to engage in professional work requiring more science, mathematics, or engineering than is included in the core curriculum in agriculture. The flexibility of the options provides an opportunity for planning individual programs of study under the supervision of a faculty adviser qualified in the student’s special field of interest.

**Option 1.** For students desiring preparation for graduate study or professional work in animal, plant, or soil science.

**Option 2.** For students desiring preparation for graduate study or professional work in the fields included in agricultural economics, agricultural law, and rural sociology.

**Option 3.** For students enrolled in the five-year combined agricultural science and agricultural engineering program.

To be eligible for admission to the curriculum, students entering as freshmen must meet the minimum selection index as determined by high school ranks and test scores. Students entering as transfers must have a scholastic grade-point average in collegiate work of not less than 4.0 for Options 1 and 2 and 3.25 for Option 3 in terms of the grading system of the University of Illinois (A = 5.0). Once enrolled, all students in Options 1 and 2 must maintain averages of at least 4.0, and those in Option 3 must maintain at least 3.0 for both their University of Illinois and cumulative averages to remain in and graduate from the curriculum. A summary of the minimum requirements for all three options follows:

SUMMARY	OPTIONS	
	1 AND 3 MINIMUM HOURS	OPTION 2 MINIMUM HOURS
General University requirements (RHET 105) .....	4 .....	4
<b>Group I:</b> College of Agriculture courses (15 of the 30 hours must be at the 200- and 300-level) .....	30 .....	30
In Option 3, a maximum of 15 hours of agricultural engineering and agricultural mechanization courses may be credited toward the degree in agriculture.		
<b>Group II:</b> Humanities (see page 98) .....	6 .....	6
<b>Group III:</b> Social sciences (see page 98) .....	9 .....	16
In Option 2, at least 8 hours in economics must be included.		
In Option 2, a minimum of 54 hours must be completed in Groups III, IV, and V combined, including the minimum hours indicated for each group.		
<b>Group IV:</b> Biological sciences (biology; ecology, ethology, and evolution; entomology; microbiology; physiology; plant biology; zoology) .....	10 .....	6
In Options 1 and 3, a total of 45 hours is required in Groups IV and V, with a minimum of 10 hours in each.		
In Option 2, a minimum of 54 hours must be completed in Groups III, IV, and V combined, including the minimum hours indicated for each group.		
<b>Group V:</b> Physical sciences (biochemistry, chemistry, computer science, geology, mathematics, physics) and approved courses in statistics .....	10 .....	16
In Options 1 and 3, a total of 45 hours is required in Groups IV and V, with a minimum of 10 hours in each.		
In Option 3, TAM 145 and 212 may be counted toward Group V.		
In Option 2, a minimum of 54 hours must be completed in Groups III, IV, and V combined, including the minimum hours indicated for each group.		
Electives (unrestricted) .....	32 .....	32
Total required for graduation .....	126 .....	126

Options 1 and 2: Sample Program

Students in both options follow a first-year program closely related to the core curriculum as outlined on page 99 of this catalog. The programs for the second, third, and fourth years are planned in consultation with the student’s faculty adviser to be consistent with the student’s career objectives and the curriculum requirements summarized on pages 98 and 99. Courses suggested to prepare students for admission to graduate study in various areas are included in the *Agriculture Student Handbook*. A total of 126 hours is required for graduation.



## Option 3: Sample Program. Five-Year Combined Program in Agricultural Science and Agricultural Engineering for the Degrees of Bachelor of Science in Agriculture and Bachelor of Science in Engineering

Students enroll in the College of Agriculture for the first three years and then transfer to the College of Engineering for the last two years. The suggested program of study that follows fulfills graduation requirements for both the Colleges of Agriculture and Engineering.

### FIRST YEAR

FIRST SEMESTER	HOURS
AG E 100—Introduction to Agricultural Engineering .....	1
MATH 112—College Algebra <sup>1</sup> .....	3
MATH 114—Plane Trigonometry <sup>1</sup> .....	2
RHET 105—Composition <sup>2</sup> .....	4
Biological sciences elective <sup>3,5</sup> .....	4
Elective in social sciences or humanities <sup>6</sup> .....	3
Total .....	17

### SECOND YEAR

FIRST SEMESTER	HOURS
AG E 126—Engineering in Agriculture .....	4
CHEM 102—General Chemistry <sup>1</sup> .....	4
MATH 132—Calculus and Analytic Geometry II ..	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
Total .....	17

### THIRD YEAR

FIRST SEMESTER	HOURS
Agriculture science elective <sup>4,5</sup> .....	4
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Wave Motion, Sound, Light, Modern Physics) .....	4
TAM 212—Engineering Mechanics II (Dynamics) .....	3
Elective in social sciences or humanities .....	2
Total .....	16

### FOURTH YEAR

FIRST SEMESTER	HOURS
Agricultural engineering technical elective, Group I <sup>7</sup> .....	3
TAM 235—Fluid Mechanics .....	4
EE 220 or 260—Circuit Analysis .....	3
Agriculture science elective <sup>4,5</sup> .....	3
Elective in social sciences or humanities <sup>6</sup> .....	3
Total .....	16

### FIFTH YEAR

FIRST SEMESTER	HOURS
Agricultural engineering technical elective, Group II <sup>7</sup> .....	3
Technical elective <sup>7</sup> .....	3
Agriculture science elective <sup>4,5</sup> .....	4
Biological sciences elective <sup>3,5</sup> .....	2
Elective in social sciences or humanities <sup>6</sup> .....	3
Total .....	15

Total ..... 158

### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 101—General Chemistry <sup>1</sup> .....	4
MATH 120—Calculus and Analytic Geometry I ...	5
GE 103—Engineering Graphics I .....	3
GE 193—Special Problem .....	0
Agriculture science elective <sup>4,5</sup> .....	4
Total .....	16

### SECOND YEAR

SECOND SEMESTER	HOURS
TAM 150—Analytic Mechanics (Statics), or TAM 152—Engineering Mechanics I (Statics) ..	2-3
ECON 101—Introduction to Economics <sup>6</sup> .....	4
MATH 242—Calculus of Several Variables .....	3
CS 101—Introduction to Computers .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
Total .....	16-17

### THIRD YEAR

SECOND SEMESTER	HOURS
AG E 127—Production Systems in Agriculture ...	3
Biological sciences elective <sup>3,5</sup> .....	4
TAM 221—Elementary Mechanics of Solids .....	3
CE 261—Introduction to Structural Engineering, or ME 220—Mechanics of Machinery <sup>7</sup> .....	3
Biological sciences elective <sup>2</sup> .....	3
Total .....	16

### FOURTH YEAR

SECOND SEMESTER	HOURS
Agricultural engineering technical elective, Group I <sup>7</sup> .....	3
AG E 298—Seminar .....	1
ME 209—Thermodynamics and Heat Transfer ...	3
Agriculture science elective <sup>4,5</sup> .....	3
Elective in social sciences or humanities <sup>6</sup> .....	3
Open elective <sup>8</sup> .....	3
Total .....	16

### FIFTH YEAR

SECOND SEMESTER	HOURS
Agricultural engineering technical elective, Group II <sup>7</sup> .....	3
AG E 299—Undergraduate Thesis .....	2
Technical elective <sup>7</sup> .....	3
Open elective <sup>8</sup> .....	5-6
Total .....	13-14

<sup>1</sup>A student with three or four years of high school mathematics, including trigonometry, and a satisfactory grade on the Mathematics Placement Test, may take MATH 120 the first semester. If MATH 120 is taken the first semester and the student has received a satisfactory score on the Chemistry Placement Test, CHEM 101 may also be taken the first semester.

<sup>2</sup>The Sp. Comm. 111-112 sequence (6 hours) may be substituted for RHET 105 and is recommended.

<sup>3</sup>A total of 10 hours in the biological sciences is required (biology; ecology, ethology, and evolution; entomology; microbiology; plant biology; physiology; zoology).<sup>5</sup>

<sup>4</sup>A total of 15 hours of agricultural science other than agricultural engineering and agricultural mechanization is required. Recommended are AGRON 121, SOILS 101, and AG EC 220.<sup>5</sup>

<sup>5</sup>To meet engineering degree requirements, 12 hours of the biological and agricultural sciences (footnotes 3 and 4) must be chosen from the following: At least 8 hours from AGRON 121, 322, 326; AN S 307; BIOL 100, 101, 104; ENTOM 120; GEOL 101, 250; MCBIO 100; PLBIO 100; SOILS 101, 308; the remainder from AG EC 220, 324, 325; AG M 200, 202, 203.

<sup>6</sup>A total of 14 hours in the social sciences and humanities are required in addition to ECON 101. An approved 6-hour sequence in both areas is required to meet College of Engineering requirements. Since the courses that the Colleges of Engineering and Agriculture accept for the humanities and social sciences requirements vary, students should be careful to select those that are acceptable to both colleges.

NOTE: History is a humanities in engineering, a social sciences in agriculture.

<sup>7</sup>Each student must have 18 to 20 hours of technical electives selected from the following: (1) CE 261 or ME 220; (2) two courses from agricultural engineering technical electives, Group I, and two courses from Group II; and (3) additional courses from other technical electives.

<sup>8</sup>Sufficient open electives to total the minimum curriculum requirement of 158 hours. All requirements of the combined curriculum (as outlined) must be completed to satisfy the requirements for both degrees.

**AGRICULTURAL ENGINEERING TECHNICAL ELECTIVES**

**HOURS**

**Group I**

AG E 236—Machine Characteristics and Mechanisms .....	3
AG E 256—Surveying Agricultural and Forest Lands .....	3
AG E 287—Environmental Control for Plants and Animals .....	3
AG E 311—Instrumentation and Measurements .....	3-4
AG E 340—Introduction to Applied Statistics .....	4
AG E 383—Engineering Properties of Food Materials .....	3

**Group II**

AG E 277—Design of Agricultural Structures .....	3
AG E 336—Design of Agricultural Machinery .....	3
AG E 346—Tractors and Prime Movers .....	3
AG E 356—Soil and Conservation Structures .....	3
AG E 357—Land Drainage .....	3
AG E 387—Agricultural Process Engineering .....	3

**OTHER TECHNICAL ELECTIVES**

A student may choose any course that satisfies the College of Engineering requirements for technical electives. A student desiring to specialize in a specific area of agricultural engineering may use the following lists as a guide in choosing technical electives. A food engineering specialization is also available and is described on page 189 of this catalog.

<b>Electric Power and Processing</b>	<b>HOURS</b>	<b>Structures and Environment</b>	<b>HOURS</b>
AG E 236 .....	3	AG E 277 .....	3
AG E 287 .....	3	AG E 287 .....	3
AG E 311 .....	3-4	AG E 311 .....	3-4
AG E 336 .....	3	AG E 340 .....	3
AG E 340 .....	3	AG E 387 .....	3
AG E 387 .....	3	CE 262 .....	3
CHEM 323 .....	4	CE 263 .....	3
ME 213 .....	3	CE 264 .....	3
ME 307 .....	3		
<b>Power and Machinery</b>	<b>HOURS</b>	<b>Soil and Water</b>	<b>HOURS</b>
AG E 236 .....	3	AG E 256 .....	2
AG E 311 .....	3-4	AG E 277 .....	3
AG E 336 .....	3	AG E 287 .....	3
AG E 340 .....	3	AG E 311 .....	3-4
AG E 346 .....	3	AG E 340 .....	3
ME 231 .....	3	AG E 356 .....	3
ME 270 .....	4	AG E 357 .....	3
		CE 255 .....	3
		CE 264 .....	3
		CE 280 .....	3



CURRICULUM IN FOOD INDUSTRY

For the Degree of Bachelor of Science in Food Industry

The food industry curriculum is more flexible than the food science curriculum (see description below) and is designed to provide students with training in preparation for careers in the food industry in business administration, engineering, production, processing, quality control, and public health. A minimum of 130 hours of credit is required for graduation.

FIRST YEAR	
FIRST SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1
FS 101—Food in Modern Society .....	3
MATH 112—College Algebra, or exemption (see mathematics course placement section, page xx) .....	3
RHET 105—Composition (see English course placement section, page 99) .....	4
Humanities (see page 98) .....	3
Total .....	14

SECOND YEAR	
FIRST SEMESTER	HOURS
ECON 101—Introduction to Economics .....	4
CHEM 102—General Chemistry .....	4
MCBIO 100—Introductory Microbiology .....	3
MCBIO 101—Introductory Experimental Microbiology .....	2
FS 260—Raw Materials for Processing .....	4
Total .....	17

THIRD YEAR	
FIRST SEMESTER	HOURS
FS 213—Food Analysis I .....	4
FS 214—Food Chemistry .....	3
Humanities .....	3
Social sciences .....	3
ACCY 200—Fundamentals of Accounting .....	3
Total .....	16

FOURTH YEAR	
FIRST SEMESTER	HOURS
FS 301—Food Processing I .....	5
Electives .....	12
Total .....	17

FIRST YEAR	
SECOND SEMESTER	HOURS
Biological sciences <sup>1</sup> .....	4
CHEM 101—General Chemistry .....	4
MATH 114—Trigonometry .....	2
SPCOM 101—Principles of Effective Speaking .....	3
Social sciences (see page 98) .....	3
Total .....	16

SECOND YEAR	
SECOND SEMESTER	HOURS
CHEM 131—Elementary Organic Chemistry .....	3
FS 202—Sensory Evaluation of Food .....	3
PHYCS 101—General Physics .....	5
Social sciences .....	3
Elective <sup>2</sup> .....	3
Total .....	17

THIRD YEAR	
SECOND SEMESTER	HOURS
FS 363—Engineering for Food Processing .....	3
FS 311—Food and Industrial Microbiology .....	3
MCBIO 312—Techniques of Applied Microbiology .....	2
Written communications elective <sup>3</sup> .....	3
Electives .....	5
Total .....	16

FOURTH YEAR	
SECOND SEMESTER	HOURS
FS 302—Food Processing II .....	5
FS 206—Inspection Trip .....	1
FS 298—Senior Seminar .....	1
FS 332—Sanitation in Food Processing .....	2
Electives .....	5-8
Total .....	17

<sup>1</sup>May be BIOL 104 or 110, PLBIO 100, or PHYSL 103.  
<sup>2</sup>Open electives are to include a specialized 15-hour group of courses selected by the student and adviser to meet specific career objectives. Examples include courses in business, engineering, and agricultural production. At least 6 hours must be at the 200 and 300 levels.  
<sup>3</sup>Approved courses include B&TW 251, 252, and 272.

CURRICULUM IN FOOD SCIENCE

For the Degree of Bachelor of Science in Food Science

This program is designed for students who wish to be trained in the scientific aspects of food processing, quality control, research, and product development for employment in the food industry, governmental agencies, and educational institutions. This curriculum also provides the scientific background for graduate study in food processing, food chemistry, food microbiology, and nutritional science. A minimum of 130 hours of credit is required for graduation.

FIRST YEAR

FIRST SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1
FS 101—Food in Modern Society .....	3
MATH 112—College Algebra (see mathematics course placement section, page 99) .....	3
MATH 114—Trigonometry .....	2
RHET 105—Composition (see English course placement section, page 99) .....	4
Social sciences (see page 98) .....	3
Total .....	16

SECOND YEAR

FIRST SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II .....	3
PHYCS 101—General Physics .....	5
FS 260—Raw Materials for Processing .....	4
Total .....	16

THIRD YEAR

FIRST SEMESTER	HOURS
FS 213—Food Analysis I .....	4
FS 314—Food Chemistry and Nutrition I .....	4
Statistics <sup>2</sup> .....	3-4
Humanities (see page 98) .....	3
Written communications elective <sup>3</sup> .....	3
Total .....	17

FOURTH YEAR

FIRST SEMESTER	HOURS
FS 301—Food Processing I .....	5
Humanities .....	3
Social sciences .....	3
Electives .....	6
Total .....	17

FIRST YEAR

SECOND SEMESTER	HOURS
Biological sciences <sup>1</sup> .....	4
CHEM 101—General Chemistry .....	4
MATH 120—Calculus and Analytic Geometry .....	5
SPCOM 101—Principles of Effective Speaking .....	3
Total .....	16

SECOND YEAR

SECOND SEMESTER	HOURS
CHEM 131—Elementary Organic Chemistry .....	3
CHEM 134—Elementary Organic Chemistry Laboratory .....	2
FS 202—Sensory Evaluation of Food .....	3
MCBIO 100—Introductory Microbiology .....	3
MCBIO 101—Introductory Experimental Microbiology .....	2
PHYCS 102—General Physics .....	5
Total .....	18

THIRD YEAR

SECOND SEMESTER	HOURS
FS 315—Food Chemistry and Nutrition II .....	4
FS 363—Engineering for Food Processing .....	3
MCBIO 311—Food and Industrial Microbiology .....	3
MCBIO 312—Techniques of Applied Microbiology .....	2
Social sciences .....	3
Total .....	15

FOURTH YEAR

SECOND SEMESTER	HOURS
FS 206—Inspection Trip .....	1
FS 298—Senior Seminar .....	1
FS 302—Food Processing II .....	5
FS 332—Sanitation in Food Processing .....	2
Electives .....	7
Total .....	16

<sup>1</sup>May be BIOL 104 or 110, PLBIO 100, or PHYSL 103.

<sup>2</sup>A minimum of 3 hours of credit in one of the following statistics courses is required: MATH 161, ECON 171 or 172, PSYCH 223, AGRON 340, AG EC 261.

<sup>3</sup>Approved list includes B&TW 251, 252, and 272.

CURRICULUM IN FORESTRY

For the Degree of Bachelor of Science in Forestry

The curriculum in forestry consists of two options. The forest science option prepares students for positions involving management of natural resources, particularly those associated with forests and forest land, including attention to environmental quality and ecology. The wood products industries option prepares students for positions in public and private wood research and in the wood-using industries. Students learn the basic anatomical, physical, chemical, and strength properties of wood as related to the use of wood. Graduates may qualify for employment in a wide range of fields with public agencies and private industry. A minimum of 130 hours of credit, including 8 hours earned in summer field study, is required for graduation.

A summer field study of seven weeks is required for all students, usually between the second and third years.



FIRST YEAR	
FIRST SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1
PLBIO 100—Plant Biology .....	4
MATH 112—College Algebra (see mathematics course placement section, page 99) .....	3
MATH 114—Trigonometry .....	2
RHET 105—Composition (see English course placement section, page 99) .....	4
CHEM 101—General Chemistry <sup>1</sup> .....	4
Total .....	18

SECOND YEAR	
FIRST SEMESTER	HOURS
GEOL 101—Principles of Geology .....	4
PHYCS 101—General Physics (Mechanics, Heat, and Sound), or PHYCS 140 <sup>2</sup> .....	5
FOR 220—Dendrology .....	4
ECON 101—Introduction to Economics .....	4
Total .....	17

FIRST YEAR	
SECOND SEMESTER	HOURS
BIOL 104—Animal Biology .....	4
CHEM 102 or 103—General Chemistry .....	4
FOR 101—General Forestry .....	3
SPCOM 101—Principles of Effective Speaking ..	3
Total .....	14

SECOND YEAR	
SECOND SEMESTER	HOURS
SOILS 101—Introduction to Soils .....	4
MATH 120—Calculus and Analytic Geometry .....	5
Electives in social sciences or humanities (see page 98) .....	6
Written communication elective <sup>3</sup> .....	3
Total .....	18

<sup>1</sup>To take CHEM 101, a student must have a satisfactory score on the Chemistry Placement Test and an exemption from MATH 112.  
<sup>2</sup>PHYCS 140 is a substitute for PHYCS 101 only for students enrolled in the forest science option.  
<sup>3</sup>Approved courses include AGCOM 114; B&TW 251, 252, 272, 302; RHET 133, 143.

SUMMER FIELD STUDIES	HOURS
FOR 201—Wildland Recreation .....	1
FOR 211—Forest Ecology .....	2
FOR 221—Forest Measurements .....	2
FOR 231—Wood Utilization I .....	1
FOR 281—Introduction to Forest Resource Management .....	2
Total .....	6

**THIRD AND FOURTH YEARS**  
The course of study for the third and fourth years follows the option selected and is planned in consultation with the student's faculty adviser.

**Forest Science Option**

The following courses are required:

	HOURS
FOR 213—Silviculture .....	3
FOR 232—Wood Utilization II, FOR 236—Physical Properties of Wood and Wood-Base Materials, or FOR 271—Wood Anatomy and Identification .....	3
FOR 351—Resource Economics .....	4
FOR 381—Resource Management .....	4
PL PA 204—Introductory Plant Pathology, <sup>1</sup> or ENTOM 120— Introduction to Applied Entomology .....	3-4
FOR 316—Advanced Forest Ecology .....	3
FOR 321—Forest Biometrics .....	4
FOR 277—Interpretation of Aerial Photography .....	3
CS 101, 103, 105, or 121—Introduction to Computers .....	3-4

Additional elective courses must be completed to bring the total hours for graduation to ..... 130  
Included within the total must be 5 credit hours chosen from a list of restricted electives in the *Agriculture Student Handbook*.

<sup>1</sup>If PL PA 204 is used to fulfill requirements, students must also enroll in PL PA 312—Diseases of Urban Trees (1 hour), or PL PA 314—Diseases of Forest Trees (1 hour).

Wood Products Industries Option

The following courses are required:

FOR 232—Wood Utilization II .....	3
FOR 236—Physical Properties of Wood and Wood-Base Materials .....	3
FOR 271—Wood Anatomy and Identification .....	3
FOR 273—Adhesives and Laminates .....	3
FOR 340—Introduction to Applied Statistics, or FOR 321—Forest Biometrics .....	3-4
FOR 351—Forest Resource Economics .....	4
FOR 372— Mechanical Properties of Wood and Wood-Base Materials .....	3

Additional elective courses must be completed to bring the total hours for graduation to 130. At least 15 of the elective hours must be from a group of restricted electives in such areas as accountancy, business administration, chemistry, finance, forestry, and mathematics. Consult the *Agriculture Student Handbook* for the complete list.

CURRICULUM IN ORNAMENTAL HORTICULTURE

For the Degree of Bachelor of Science in Ornamental Horticulture

This curriculum prepares the student for a career in the production, marketing, and use of ornamental crops; in teaching, research, or other related professional activity; or in a business providing services or related to ornamental horticulture. Opportunities open to graduates are: the production of flowers and ornamental plants in greenhouses and nurseries; plant breeding; flower shop management and floral designing; park and golf course management; positions as sales representatives and technicians with seed and plant suppliers, chemical industries, and horticultural supply firms; employment with state or federal governmental agencies or institutions as teachers, researchers, horticultural advisers, crop inspectors, and consultants; and writing.

A minimum of 130 hours of credit is required for graduation.

FIRST YEAR

FIRST SEMESTER	HOURS
AGR 100—Agriculture in Modern Society .....	1
PLBIO 100—Plant Biology .....	4
Course from Group I .....	3
HORT 100—Introduction to Horticulture .....	3
MATH 112—College Algebra (see mathematics course placement section, page 99) .....	3
SPCOM 111—Verbal Communication (see English course placement section, page 99) .....	3
Total .....	17

SECOND YEAR

FIRST SEMESTER	HOURS
CHEM 102—General Chemistry or CHEM 103—General Chemistry: Organic Chemical Studies .....	4
Courses from Groups I and II .....	8-9
Elective .....	3-4
Total .....	15-17

FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 101—General Chemistry (see chemistry course placement section, page 99) .....	4
Course from Group I .....	3
ENTOM 120—Introduction to Applied Entomology .....	3
MATH 114—Plane Trigonometry .....	2
SPCOM 112—Verbal Communication .....	3
Total .....	15

SECOND YEAR

SECOND SEMESTER	HOURS
SOILS 101—Introductory Soils .....	4
Courses from Groups I and II .....	6
ECON 101—Introduction to Economics .....	4
Elective .....	3
Total .....	17

THIRD AND FOURTH YEARS

The third and fourth years are to be devoted to fulfillment of the group requirements listed below.

Group Requirements

GROUP I: HUMANITIES AND SOCIAL SCIENCES HOURS

An approved 6 hours in the humanities and a minimum of 9 hours from two departments in the social sciences (including ECON 101) ..... 15

GROUP II: PRESCRIBED HORTICULTURE AND SUPPORTING COURSES

ACCY 200—Fundamentals of Accounting, or ACCY 201—Principles of Accounting I .....	3
PLBIO 260—Introductory Plant Taxonomy, or PLBIO 366—Field Botany .....	3-5
HORT 100—Introduction to Horticulture .....	3
HORT 201—Identification and Use of Woody Ornamental Plants I .....	3
HORT 202—Identification and Use of Woody Ornamental Plants II .....	3



HORT 221—Plant Propagation .....	3
HORT 226—Bedding Plant Production, Use, and Identification .....	3
Pl. Pa. 204—Introductory Plant Pathology .....	3
Total .....	24-26

**GROUP III: HORTICULTURE ELECTIVE COURSES**

A minimum of 15 hours to be selected from the following:

HORT 210—Home Grounds Planning and Design; HORT 211—Home Grounds Development and Construction; HORT 212—Landscape Contracting; HORT 220—Plant and Animal Genetics; HORT 222—Greenhouse Management; HORT 223—Floricultural Crops Production I; HORT 224—Floricultural Crops Production II; HORT 227—Indoor Plant Culture, Use, and Identification; HORT 230—Herbaceous Perennials, Identification, and Use; HORT 231—Floral Design I; HORT 232—Flower Shop Management and Floral Design II; HORT 234—Nursery Management; HORT 236—Turfgrass Management; HORT 242—Commercial Vegetable Production; HORT 251—Arboriculture; HORT 261—Small Fruit and Viticulture Science; HORT 261—Tree Fruit Science; HORT 300—Special Problems (maximum of 5 hours); HORT 321—Floricultural Physiology; HORT 322—Plant Nutrition; HORT 323—Principles of Plant Breeding; HORT 336—Perennial Grass Ecosystems; HORT 345—Growth and Development of Horticultural Crops.

**GROUP IV: AREA OF SPECIALIZATION COURSES**

An additional 15 hours consistent with the student's specific career interest is selected in consultation with the faculty adviser from an extensive list of prescribed courses. Included are courses in such areas as accountancy, agricultural economics, agronomy, art, business administration, chemistry, computer science, plant biology, and plant pathology. A complete listing of acceptable courses appears in the *Agriculture Student Handbook*.

**CURRICULUM IN SOIL SCIENCE**

**For the Degree of Bachelor of Science in Soil Science**

This curriculum is especially designed for students who plan to engage in professional work requiring more soil science, mathematics, chemistry, and physics than is included in the core curriculum in agriculture, and for students who plan to do graduate study in soil science. The curriculum in soil science also prepares the student for positions dealing with the management of natural resources, particularly those involving agricultural, forest, or range soils, with attention to the effect of land use on environmental quality.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
AGR 100—Agriculture in Modern Society .....	1
RHET 105—Composition (see English course placement section, page 99) .....	4
MATH 112—College Algebra (see mathematics course placement section, page 99) .....	3
MATH 114—Trigonometry .....	2
AGRON 121—Principles of Field Crop Science ..	4
Social sciences (see page 98) .....	3
Total .....	17

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
PLBIO 100—Plant Biology .....	4
CHEM 102—General Chemistry .....	4
PHYCS 101—General Physics .....	5
Humanities (see page 98) .....	3
Total .....	16

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
SOILS 101—Introduction to Soils .....	4
SPCOM 101—Principles of Effective Speaking ..	3
CHEM 101—General Chemistry .....	4
MATH 120—Calculus and Analytic Geometry .....	5
Total .....	16

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
GEOL 107—General Geology .....	4
CHEM 122—Elementary Quantitative Analysis ...	4
PHYCS 102—General Physics .....	5
ECON 101—Introduction to Economics .....	4
Total .....	17

**THIRD AND FOURTH YEARS**

Courses are chosen in consultation with the student's adviser and must include the following:

**Prescribed courses in Agriculture:**

AGRON 330—Plant Physiology .....	3
SOILS 301—Soil Survey with Emphasis on Illinois Soils .....	3

**Elective courses in Soils .....** 15

SOILS 302—Soil Testing Practicum, SOILS 303—Soil Fertility and Fertilizers, SOILS 304—Soil Management and Conservation, SOILS 305—Biochemical Processes in Soil and Water Environments, SOILS 307—Soil Chemistry, SOILS 308—Physics of the Plant Environment, SOILS 311—Laboratory Methods for Soil Research, SOILS 313—Soil Mineral Analysis.

**Elective courses in Agronomy** ..... 6

AGRON 220—Plant and Animal Genetics, AGRON 318—Crop Growth and Production, AGRON 319—  
Environment and Plant Ecosystems, AGRON 322—Forage Crops and Pastures, AGRON 326—Weeds  
and Their Control

Elective courses in agriculture to bring total hours in agriculture courses to a minimum of ..... 40

Additional humanities courses (see page 98) to bring total hours to ..... 6

Additional social sciences courses (see page 98) to bring total hours to ..... 9

Other prescribed courses:

MCBIO 100—Introductory Microbiology, and MCBIO 101—Introductory  
Experimental Microbiology ..... 5

CHEM 131—Elementary Organic Chemistry ..... 3

Written communication elective (chosen from AG COM 114; B&TW 251, 252, 272) ..... 3

Open electives to bring total hours to ..... 126

**PROGRAM IN PREPROFESSIONAL VETERINARY MEDICINE**

Most students wishing to complete the preprofessional requirements for veterinary medicine in the College of Agriculture follow Option 1 of the agricultural science curriculum, or the animal science major-science option.

Because of the competition for admission, the student should plan a bachelor’s degree program that will prepare him or her for a career alternative should admission to the professional program not be obtained. Recently there have been approximately two qualified applicants for each space available in the entering class in veterinary medicine. The mean grade-point average of admitted students was slightly above 4.5 (A = 5.0). Specific information about veterinary medicine, including admission requirements, can be found on page 333.

**CURRICULUM IN HUMAN RESOURCES AND FAMILY STUDIES**

**For the Degree of Bachelor of Science in Human Resources and Family Studies**

This four-year curriculum in the School of Human Resources and Family Studies, College of Agriculture, is designed for students who want to pursue careers in the home economics-oriented professions. The human resources and family studies curriculum combines a liberal arts education with the study of various ecological subsystems as they affect and are affected by individuals and families. The 120 to 130 hours required for graduation include prescribed courses of which at least 28 hours must be in human resources and family studies selected according to the requirements for one of the following options: consumer economics, dietetics, foods and nutrition, foods in business, general home economics, human development and family studies, marketing of textiles and apparel, and textiles and apparel.

Students preparing for managerial positions in restaurants and other commercial food service units should meet the requirements specified in the curriculum in restaurant management (page 124).

The following numbers of hours in the designated areas of study and certain specific courses listed below are required in all options of the School of Human Resources and Family Studies curriculum:

	<b>HOURS</b>
Basic disciplines—design, humanities, natural sciences, and social sciences, to include a minimum of: 40-58	
Art and design .....	2-3
Humanities (see page 98) .....	6
Natural sciences (see page 98) to include: .....	12
Physical sciences (minimum 3 hours)	
Biological sciences (minimum 3 hours)	
(see option listings for specific science requirements for each option)	
Social sciences to include at least one course in principles of economics and one in psychology (see page 98) .....	9
Human resources and family studies (home economics) .....	28-44
MATH 112, or exemption by Mathematics Placement Test .....	0-5
RHET 105 or 108, and SPCOM 101, or SPCOM 111 and 112 .....	7
Other option requirements .....	0-24
Electives, to bring total to 120, 126, or 130 .....	11-52



The suggested program for the first two years of the curriculum, shown in detail below, provides a foundation for the various options and allows some variation for the personal and career objectives of individual students.

<b>FIRST YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
HRFS 100—Contemporary Issues in Human Resources and Family Studies .....	1
Another human resources and family studies course .....	3
MATH 112—College Algebra .....	3
PSYCH 100—Introduction to Psychology .....	4
RHET 105 or 108—Composition, or SPCOM 111—Verbal Communications .....	3-4
Total .....	14-15

<b>SECOND YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
A human resources and family studies course ....	3
Humanities .....	3
Natural and/or social sciences .....	3-7
Other curriculum or option requirements .....	3-5
Total .....	16-17

<b>FIRST YEAR</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
Art and design .....	2-3
A human resources and family studies course(s) .....	3
Humanities .....	3
Natural science .....	3-4
SPCOM 101—Principles of Effective Speaking or SPCOM 112—Verbal Communications .....	3
Total .....	14-16

<b>SECOND YEAR</b>	
<b>SECOND SEMESTER</b>	<b>HOURS</b>
A human resources and family studies course ....	3
Natural and/or social sciences .....	3-7
Other curriculum or option requirements .....	6-8
Humanities .....	0-9
Total .....	16-17

### THIRD AND FOURTH YEARS

The programs for the third and fourth years are largely determined by the option selected, and must be planned in consultation with the student's faculty adviser. The options are described below. A student should declare an option no later than the first semester of the sophomore year. Human resources and family studies courses as prescribed by the option, plus three human resources and family studies courses from outside the option area, must total a minimum of 28 hours. Areas are: family and consumer economics, human development and family studies, foods and nutrition, and textiles and apparel. (Prescribed courses in the general option include at least one course from each of the five areas.)

## Consumer Economics

<b>COURSES IN HUMAN RESOURCES AND FAMILY STUDIES</b>	<b>HOURS</b>
FACE 170—Consumer Economics .....	3
FACE 270—Family Financial Management .....	3
FACE 313—Economics of Consumption .....	3
FACE 370—Family Economics .....	3
FACE 371—The Family as a Consuming Unit .....	3
HDFS 210—Comparative Family Organizations .....	3
A total of 6 additional hours selected from: FACE 276—Engineering Applications in Residential Housing, FACE 314—Consumption in Developing Countries; FACE 373—Family Resource Management, FACE 379—Problems in Family, Consumer, and Consumption Economics, TA 295—Textiles and Apparel in the International Economy and TA 395—Macroenvironment of Textile and Apparel Businesses.	

Two additional human resources and family studies courses to be chosen from outside family and consumer economics area.

<b>BASIC DISCIPLINE COURSES</b>	<b>HOURS</b>
Art and design .....	2-3
ECON 101—Introduction to Economics .....	4
ECON 301—Intermediate Macroeconomic Theory .....	3
MATH 124—Finite Mathematics .....	3
MATH 134—Calculus for Social Scientists .....	4
POL S 150—American Government .....	3
PSYCH 100—Introduction to Psychology, or PSYCH 103—Introduction to Experimental Psychology .....	4
SOC 100—Introduction to Sociology .....	3
Natural Sciences electives, including one of the biological sciences (see page 98) .....	6
Humanities electives (see page 98) .....	6
Basic discipline1 electives to bring total to .....	40

**OTHER REQUIRED COURSES**

**HOURS**

CHEM 100—Introductory Chemistry or exemption .....	2
ADV 281—Introduction to Advertising, or B ADM 337—Promotion Management .....	3
AG COM 114—Agriculture Communications Media and Methods .....	3
B ADM 202—Principles of Marketing .....	3
ECON 172—Economic Statistics I .....	3
Open electives to bring total to .....	120

<sup>1</sup>Basic disciplines are art and design, humanities, natural sciences, and social sciences.

**Dietetics Program (Approved by the American Dietetics Association)**

**COURSES IN HUMAN RESOURCES AND FAMILY STUDIES**

**HOURS**

FN 130—Food Selection and Preparation .....	3
FN 131—Food Management .....	3
FN 220—Principles of Nutrition .....	3
FN 231—Science of Foods .....	3
FN 240—Quantity Food Production and Service .....	3-5
FN 320—Nutritional Aspects of Disease .....	3
FN 324—Biochemical Aspects of Human Nutrition .....	3
FN 345—Food Purchasing and Equipment Selection .....	3
FN 350—Institution and Restaurant Management: Organization and Administration .....	4
One course selected from FN 322—Nutrition through the Life Cycle, FN 330—The Experimental Study of Foods, FN 328—Community Nutrition, FN 329—Theraeotic Nutrition and Assessment	
Three additional human resources and family studies courses chosen from outside the foods and nutrition division .....	9-12

**BASIC DISCIPLINE COURSES**

**HOURS**

Art and design .....	2-3
CHEM 101—General Chemistry .....	4
CHEM 102—General Chemistry .....	4
CHEM 122—Elementary Quantitative Analysis, or CHEM 123— Quantitative Analysis .....	3
CHEM 131—Elementary Organic Chemistry .....	3
CHEM 134—Elementary Organic Chemistry Laboratory .....	2
BIOCH 350—General Biochemistry; or BIOCH 352—General Biochemistry I, and BIOCH 353—General Biochemistry II .....	3-8
BIOCH 355—Biochemistry Laboratory .....	4
ECON 101—Introduction to Economics .....	4
Humanities electives (see page 98) .....	6
MCBIO 100—Introductory Microbiology, and MCBIO 101— Introductory Experimental Microbiology .....	5
PHYSL 103—Introduction to Human Physiology; or BIOL 110— Principles of Biology I, and BIOL 111—Principles of Biology II .....	4-10
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
SOC 100—Introduction to Sociology .....	3

**OTHER REQUIRED COURSES**

**HOURS**

B ADM 210—Management and Organizational Behavior, or B ADM 247—Introduction to Management .....	3
B ADM 321—Individual Behavior in Organizations, B ADM 351— Personnel Administration, or PSYCH 245—Industrial Psychology .....	3
EDPSY 211—Educational Psychology .....	3
MATH 112 or exemption .....	3
RHET 105 and SPCOM 101, or SPCOM 111 and 112 .....	6-7
Statistics <sup>1</sup> .....	3
Total .....	126

<sup>1</sup>Select from ECON 171, 172; SOC 185; AG EC 261; AGRON 340; EDPSY 390; STAT 100.



## Foods and Nutrition

### **PRESCRIBED COURSES IN HUMAN RESOURCES AND FAMILY STUDIES**

### **HOURS**

FN 130—Food Selection and Preparation .....	3
FN 131—Food Management .....	3
FN 220—Principles of Nutrition .....	3
FN 231—Science of Food .....	3
FN 324—Biochemical Aspects of Human Nutrition .....	3
FN 330—Experimental Foods .....	4
At least 3 additional hours from FN 240—Quantity Food Production and Service, FN 320—Nutritional Aspects of Disease, FN 322—Nutrition through the Life Cycle, or FN 331—Problems in Foods .....	3-5
Additional human resources and family studies courses, including three courses chosen from outside the foods and nutrition division .....	9

### **BASIC DISCIPLINE COURSES**

### **HOURS**

Art and design .....	2-3
CHEM 101—General Chemistry .....	4
CHEM 102—General Chemistry .....	4
CHEM 122—Elementary Quantitative Analysis, or CHEM 123— Quantitative Analysis .....	3
CHEM 131—Elementary Organic Chemistry .....	3
CHEM 134—Elementary Organic Chemistry Laboratory .....	2
BIOCH 350—General Biochemistry; or BIOCH 352—General Biochemistry I, and BIOCH 353—General Biochemistry II .....	3-8
BIOCH 355—Biochemistry Laboratory .....	4
ECON 101—Introduction to Economics .....	4
Humanities electives (see page 98) .....	6
MATH 114—Plane Trigonometry .....	2
MATH 120—Calculus and Analytic Geometry .....	5
MCBIO 100—Introductory Microbiology, and MCBIO 101— Introductory Experimental Microbiology .....	5
PHYSL 103—Introduction to Human Physiology; or BIOL 110— Principles of Biology I, and BIOL 111—Principles of Biology II .....	4-10
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
Social sciences elective (see page 98) .....	3
Statistics <sup>1</sup> .....	3
Open electives to bring total to .....	126

<sup>1</sup>Select from ECON 171, 172; SOC 185; AGRON 340; EDPSY 390; STAT 100.

## Foods in Business

### **COURSES IN HUMAN RESOURCES AND FAMILY STUDIES**

### **HOURS**

FN 130—Food Selection and Preparation .....	3
FN 131—Food Management .....	3
FN 220—Principles of Nutrition .....	3
FN 231—Science of Food .....	3
FN 330—Experimental Foods .....	4
Additional human resources and family studies courses, including three courses chosen from outside the foods and nutrition division.	

### **BASIC DISCIPLINE COURSES<sup>1</sup>**

### **HOURS**

Art and design .....	2-3
CHEM 101—General Chemistry .....	4
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies .....	4
ECON 101—Introduction to Economics .....	4
Humanities electives (see page 98) .....	6
MCBIO 100—Introductory Microbiology, and MCBIO 101— Introductory Experimental Microbiology .....	5
PHYSL 103—Introduction to Human Physiology; or BIOL 110—Principles of Biology I, and BIOL 111—Principles of Biology II .....	4-10
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
Social sciences elective (see page 98) .....	3
Basic discipline electives to bring total to .....	40

OTHER REQUIRED COURSES		HOURS
B ADM 202—Principles of Marketing .....		3
B&TW 251—Business and Administrative Communications .....		3
B&TW 271—Sales Writing, B&TW 272—Report Writing, or SPCOM 230—Interpersonal Communications .....		3
FS 260—Raw Materials for Processing, or AG EC 335—Food Marketing .....		4
SPCOM 101—Principles of Effective Speaking .....		3
Statistics <sup>2</sup> .....		3
A total of 12 hours from: AGCOM (200- or 300-level); B ADM 200, 210, 212, 247; FACE 313, 370, 371; SPCOM 211, 221; a micro-computer course .....		12
A total of 6 hours from (a) FN 202, 240, 250, 322, 331; FS 314 or (b) ACCY 201 and 202, ADV 281, FN 202 .....		6
Open electives to bring total to .....		126

<sup>1</sup>Basic disciplines are art (design), humanities, natural sciences, and social sciences.  
<sup>2</sup>Select from ECON 171, 172; SOC 185; AGRON 340; AG EC 261; EDPSY 390; STAT 100.

General Home Economics

COURSES IN HUMAN RESOURCES AND FAMILY STUDIES		HOURS
FACE 170—Consumer Economics .....		3
FACE 270—Family Financial Management .....		3
FN 120—Contemporary Nutrition .....		3
FN 130—Food Selection and Preparation .....		3
HDFS 105—Introduction to Human Development .....		3
HDFS 110—Introduction to Family Ecology .....		3
TA 183—Consumer Textiles .....		3
Additional electives in human resources and family studies, including a minimum of 12 hours at the 200 and 300 levels, with at least two courses at the 300-level, to bring total to .....		45

BASIC DISCIPLINE COURSES		HOURS
ART&D 185—Design .....		3
CHEM 101—General Chemistry .....		4
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies .....		4
ECON 101—Introduction to Economics .....		4
Humanities (see page 98) .....		6
MCBIO 100—Introductory Microbiology .....		3
PHYSL 103—Introduction to Human Physiology .....		4
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....		4
SOC 100—Introduction to Sociology .....		3
Communications <sup>1</sup> .....		3
Basic discipline <sup>2</sup> electives to bring total to .....		40
Open electives to bring total to .....		126

<sup>1</sup>One course from AG COM 114; B&TW 251, 252, 272, 302; RHET 133, 143.  
<sup>2</sup>Basic disciplines are art and design, humanities, natural sciences, and social sciences.

Human Development and Family Studies

COURSES IN HUMAN RESOURCES AND FAMILY STUDIES		HOURS
FN 120—Contemporary Nutrition .....		3
HDFS 105—Introduction to Human Development .....		3
HDFS 106—Observation and Assessment of Human Development .....		3
HDFS 210—Comparative Family Organization .....		3
Two human resources and family studies courses chosen from outside the human development and family studies division .....		6

(Choose one)

Option A: Child and Adolescent Development		
HDFS 202—Development of Curriculum for Infants and Preschoolers .....		4
HDFS 203—Infancy and Early Development .....		4
HDFS 301—Issues in Socialization and Development .....		3
HDFS 316—Adolescent Development .....		3
One course from HDFS 310, 315, 330 .....		3
Human resources and family studies electives—appropriate to a career or professional track .....		4



### Option B: Adult Development and Aging

HDFS 214—Introduction to Aging .....	3
HDFS 302—Sex Roles .....	3
HDFS 304—Gerontology .....	3
HDFS 315—Critical Transitions in Families .....	3
One course from HDFS 215, 310, 330 .....	3
Human resources and family studies electives—appropriate to a career or professional track .....	6

### Option C: Family Studies

HDFS 215—Courtship and Marriage .....	3
HDFS 310—Contemporary American Family .....	3
HDFS 315—Critical Transition in Families .....	3
HDFS 330—The Family in International Settings or HDFS 370—Family Conflict Management .....	3
One course from: HDFS 203, 301, 302, 304, 316 .....	3
Human resources and family studies electives—appropriate to a career or professional track .....	6

### BASIC DISCIPLINE COURSES

### HOURS

ANTH 103—Introduction to Cultural Anthropology .....	4
Art and design .....	2-3
Biological sciences: genetics and one other (see page 98) .....	8
ECON 101—Introduction to Economics .....	4
Humanities electives (see page 98) .....	6
PHYSL 103—Introduction to Human Physiology .....	4
Physical sciences elective (see page 98) .....	3
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
Social sciences electives (see page 98) .....	6
Sociology or rural sociology .....	3
Communications <sup>1</sup> .....	3
Open electives to bring total to .....	126

<sup>1</sup>One course from B &TW 251, 252, 272; RHET 133, 143, 302.

## Marketing of Textiles and Apparel

### COURSES IN HUMAN RESOURCES AND FAMILY STUDIES

### HOURS

TA 184—Apparel Design and Selection .....	3
TA 182—Apparel Production Analysis .....	3
TA 183—Introduction to Textiles .....	3
TA 295—Textile and Apparel in International Economy .....	3
TA 296—Administrative Retailing .....	3
TA 395—Macroenvironment of Textile and Apparel Businesses .....	3
A total of 9 hours chosen from: TA 250 or 350—Textile and Apparel Practicum, TA 280—Textiles for Interiors, TA 285—History of Costume, TA 287—Dress and Human Behavior, TA 380—Advanced Textiles, TA 385—History of Textiles; TA 388— Problems in Textiles and Apparel .....	9
Two additional human resources and family studies courses in areas other than textiles and apparel .....	6

### BASIC DISCIPLINE COURSES

### HOURS

ARTHI 115—Art Appreciation, or ARTHI 116—Masterpieces of Art .....	3
ART&D 185--Design .....	3
ART&D 186—Design .....	3
CHEM 101—General Chemistry .....	4
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies .....	4
ECON 101—Introduction to Economics .....	4
ECON 313 or FACE 313—Economics of Consumption .....	3
Humanities electives (see page 98) .....	3
MATH 134—Calculus for Social Scientists .....	4
MCBIO 100—Introductory Microbiology; and MCBIO 101— Introductory Experimental Microbiology; or PHYSL 103— Introduction to Human Physiology .....	4-5
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
PSYCH 201—Introduction to Social Psychology .....	3
SOC 100—Introduction to Sociology .....	3

<b>OTHER REQUIRED COURSES</b>	<b>HOURS</b>
ACCY 201 and 202—Principles of Accounting I and II .....	6
ADV 281—Introduction to Advertising .....	3
B ADM 202—Principles of Marketing .....	3
B ADM 212—Retail Management .....	3
B&TW 251—Business and Administrative Communication .....	3
SPCOM 101—Principles of Effective Speaking .....	3
ECON 172—Economic Statistics .....	3
Open electives to bring total to .....	120

## Textiles and Apparel

<b>COURSES IN HUMAN RESOURCES AND FAMILY STUDIES</b>	<b>HOURS</b>
TA 182—Apparel Production Analysis .....	3
TA 183—Introduction to Textiles .....	3
TA 184—Apparel Design and Selection .....	3
TA 190—Cross-Cultural Analysis of Dress .....	3
TA 295—Textile and Apparel in International Economy <sup>1</sup> .....	3
A total of 15 hours selected from: TA 250—Textile and Apparel Business Internship, TA 280—Textiles for Interiors, TA 285—History of Costume, TA 287—Dress and Human Behavior, TA 291—Thesis, TA 292—Thesis; TA 380—Advanced Textiles, TA 385—History of Textiles, TA 388—Problems in Textiles and Apparel, TA 395—Macroenvironment of Textile and Apparel Businesses	
Additional human resources and family studies courses, including three courses in areas other than textiles and apparel .....	15

<b>BASIC DISCIPLINE COURSES</b>	<b>HOURS</b>
ARTHI 115—Art Appreciation; ARTHI 116—Masterpieces of Art; or ARTHI 111—Ancient and Medieval Art, and ARTHI 112—Renaissance and Modern Art <sup>2</sup> .....	3
ART&D 185—Design, or ARTGP 119—Design I .....	3
CHEM 101—General Chemistry .....	4
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies .....	4
ECON 101—Introduction to Economics .....	4
Humanities electives .....	3
A course in the biological sciences with laboratory .....	4
PSYCH 100—Introduction to Psychology, or PSYCH 103—Introduction to Experimental Psychology .....	4
SOC 100—Introduction to Sociology .....	3
PSYCH 201, or SOC 201—Introduction to Social Psychology .....	3
Basic discipline <sup>3</sup> electives to bring total to .....	40
Open electives to bring total to .....	120

<b>OTHER REQUIRED COURSES</b>	<b>HOURS</b>
B&TW 251—Business and Administrative Communication .....	3
RHET 105 and SPCOM 101, or SPCOM 111 and 112 .....	6-7
Statistics <sup>4</sup> .....	3
Total required hours .....	120

<sup>1</sup>B ADM 202 prerequisite waived.

<sup>2</sup>If taken, no additional humanities required.

<sup>3</sup>Basic disciplines are art and design, humanities, natural sciences, and social sciences.

<sup>4</sup>Select from ECON 171, 172; SOC 185; PSYCH 233, 234, 235; AGRON 340, MATH 161, STAT 100.

## CURRICULUM IN RESTAURANT MANAGEMENT

### For the Degree of Bachelor of Science in Restaurant Management

The curriculum in restaurant management prepares students for entry-level management positions in hotels, catering, restaurants, and other administrative food service units. The program also qualifies the student for sales positions in the food service industry and other hospitality-related businesses. A total of 126 hours of credit is required for graduation.



Two summers (a minimum of eight weeks each), or equivalent, of practical restaurant experience are required and must be completed before registering in FN 355. This experience normally should come at the end of the second and third years.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
HRFS 100—Contemporary Issues in Human Resources and Family Studies <sup>1</sup> .....	1
MATH 112—College Algebra .....	3
CHEM 100—Introduction to Chemistry (see chemistry course placement section, page 99) .....	2
PSYCH 100—Introduction to Psychology, or PSYCH 103— Introduction to Experimental Psychology .....	4
RHET 105 or 108—Composition <sup>1</sup> (see English course placement section, page 99) .....	4
FN 130—Food Selection and Preparation .....	3
Total .....	17

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
AN S 109—Meat Purchasing and Preparation ....	2
CHEM 102—General Chemistry, or CHEM 103—General Chemistry: Organic Chemical Studies .....	4
ECON 101—Introduction to Economics .....	4
FN 120—Contemporary Nutrition .....	3
Humanities (see page 98) .....	3
Total .....	16

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
ACCY 202—Principles of Accountancy II .....	3
FN 240—Quantity Food Production and Service .....	3-5
FN 345—Food Purchasing and Equipment Selection .....	3
B ADM 202—Principles of Marketing .....	3
ECON 240—Labor Problems .....	3
Total .....	15-17

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
B ADM 321—Individual Behavior in Organizations, B ADM 351— Personnel Administration, or PSYCH 245—Industrial Organizational Psychology .....	3
Human resources and family studies elective ....	3
Open electives .....	7
Total .....	13

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CHEM 101—General Chemistry .....	4
MCBIO 100—Introduction to Microbiology, MCBIO 101—Introduction to Experimental Microbiology .....	5
SOC 100—Introduction to Sociology .....	3
SPCOM 101—Principles of Effective Speaking <sup>2</sup> .	3
FN 131—Food Management .....	3
Total .....	18

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
ECON 172*—Economic Statistics I .....	3
ACCY 201—Principles of Accountancy I .....	3
FN 231—Science of Foods .....	3
B&TW 251—Business Administrative Communication .....	3
Humanities elective .....	3
Total .....	15
Summer experience—8 weeks	

\*Prerequisite: MATH 134 or equivalent

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
B ADM 210—Management and Organizational Behavior, or B ADM 247—Introduction to Management .....	3
B ADM 261—Summary of Business Law .....	3
Human resources and family studies elective ....	6
Open electives .....	6
Total .....	18
Summer experience—8 weeks, or FN 250—Food Nutrition Internship	

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
FN 350—Institution and Restaurant Management Organization and Administration .....	4
FN 355—Specialized Quantity Food Production and Management .....	4
Open electives .....	6
Total .....	14

<sup>1</sup>SPCOM 111 and 112 may be substituted for RHET 105 or 108, and SPCOM 101.

CURRICULUM IN VOCATIONAL HOME ECONOMICS EDUCATION

For the Degree of Bachelor of Science in Home Economics Education

The purpose of this curriculum is to prepare students to teach home economics to young people and adults in both school and nonschool settings. Students may choose one of the following areas:

- I. General Home Economics Education
- II. Human Development and Child Care Occupations
- III. Foods and Nutrition and Food Service Occupations
- IV. Textiles and Apparel and Related Occupations
- V. Housing, Interior Design, Equipment, and Related Occupations
- VI. Consumer Education and Home Management
- VII. Teaching Home Economics in Nonschool Settings

A minimum of 130 semester hours is required for graduation. For teacher education requirements applicable to all curricula, see pages 87 to 92.

General Education—Required in Areas I-VII	HOURS
American government (Areas I-VI only)	3
ART&D 185 or an acceptable alternative	2-3
ART&D 186 (Areas I, IV, and V only)	3
CHEM 101	4
CHEM 102 or 103	4
Humanities <sup>1</sup> (to include one course each in English or American literature and one course in non-Western culture)	12
Mathematics <sup>1</sup>	3
MCBIO 100 and 101	5
Health/physical development <sup>1</sup>	3
PHYSL 103—Introductory Human Physiology	4
PSYCH 100 or 103	4
RHET 105 or 108 and SPCOM 101 (or SPCOM 111 and 112)	6-7
American history (Areas I-VI only)	3-4
Additional writing course <sup>1</sup>	3
Social sciences elective <sup>1</sup>	3
Total	65-68

<sup>1</sup>Courses chosen from Council on Teacher Education—approved list; pending final approval.

Professional Education—Required in Areas I-VI	HOURS
EDPSY 211	3
EPS 201	3
VOTEC 101, 240, and 278; and VOTEC 309 or SP ED 307	10
SE ED 241	3
ED PR 150 and 242	2-10
Total	21-29

Professional Education—Required in Area VII	HOURS
EDPSY 211	3
VOTEC 101 and 152	4
VOTEC 240 and 278, and VOTEC 309 or SP ED 307	8
SE ED 241	3
AHCE 362	4
EPS 201	3
Total	25

Human Resources and Family Studies Courses (Home Economics)

The student may choose one of the following six secondary school teaching areas. For Area I (general), requirements include 44 or 45 hours of specific home economics courses. Areas II through VI are specialized programs that require at least 36 hours in home economics with at least 6 hours at the 300 level. At least 18 hours in human resources and family studies courses must be taken at the 200 to 300 level.



AREA I: GENERAL HOME ECONOMICS EDUCATION <sup>1</sup>	HOURS
HDFS 105—Introduction to Human Development .....	3
HDFS 106—Observation and Assessment of Behavior, or HDFS 202—Child Development Methods and Experiences .....	4
FN 120—Contemporary Nutrition .....	3
FN 130—Food Selection and Preparation .....	3
FN 131—Food Management .....	3
TA 183—Consumer Textiles .....	3
TA 184—Apparel Design and Selection .....	2
HDFS 110—Introduction to Family Ecology, or HDFS 215—Courtship and Marriage .....	3
FN 220—Principles of Nutrition .....	3
FN 231—Science of Foods .....	3
FACE 270—Family Financial Management .....	3
FACE 373—Family Resource Management .....	3
HDFS 214, 301, 304, 310, or 315, or alternative .....	3
Minimum of 6 hours from the following:	
FACE 276—Engineering Applications in Residential Housing	
FN 322—Nutrition through the Life Cycle	
FN 330—The Experimental Study of Foods	
FACE 313—Economics of Consumption	
FACE 370—Family Economics	
TA 380—Advanced Textiles	
Minimum total .....	47
AREA II: HUMAN DEVELOPMENT AND CHILD CARE OCCUPATIONS <sup>1</sup>	
Minimum of 12 hours in child and family courses from the following: HDFS 105, 106, 110, 202, 203, 215, 301	
Minimum of 6 hours in foods and nutrition	
Minimum of 6 hours in one of the following specializations:	
Housing	
Home management, family economics, and equipment	
Textiles and apparel	
Human resources and family studies electives, 12 to 21 hours	
Total of a minimum of .....	36 hours
AREA III: FOODS AND NUTRITION AND FOOD SERVICE OCCUPATIONS <sup>1</sup>	
Foods and nutrition courses:	
FN 120—Contemporary Nutrition	
FN 130—Food Selection and Preparation	
FN 131—Food Management	
FN 220—Principles of Nutrition	
FN 231—Science of Food	
FN 240—Quantity Food Production and Service	
At least one of the following:	
FN 322—Nutrition through the Life Cycle	
FN 330—The Experimental Study of Foods	
FN 345—Food Purchasing and Equipment Selection	
FN 350—Institution and Restaurant Management: Organization and Administration	
Minimum of 6 hours each in two of the following specializations:	
Child and family	
Housing	
Home management, family economics, and equipment	
Textiles and apparel	
Human resources and family studies electives, 7 to 15 hours	
Total of a minimum of .....	36 hours
AREA IV: TEXTILES AND APPAREL, AND RELATED OCCUPATIONS <sup>1</sup>	
Minimum of 12 hours in textiles and apparel courses	
Minimum of 6 hours each in two of the following specializations:	
Child and family	
Housing	
Home management, family economics, and equipment	
Foods and nutrition	
Human resources and family studies electives, 12 to 21 hours	
Total of a minimum of .....	36 hours

**AREA V: HOUSING, EQUIPMENT, AND RELATED OCCUPATIONS<sup>1</sup>**

Minimum of 14 hours from the following:

- TA 183—Consumer Textiles
- TA 280—Household Textiles
- FACE 276—Engineering Applications in Residential Housing
- FACE 378—Problems in Management, Equipment, and Housing

Minimum of 6 hours each in two of the following specializations:

- Child and family
- Home management, family economics, and equipment
- Foods and nutrition
- Textiles and apparel
- Human resources and family studies electives, 10 to 19 hours

Total of a minimum of .....36 hours

**AREA VI: CONSUMER EDUCATION AND HOME MANAGEMENT<sup>1</sup>**

Minimum of 12 hours from the following:

- FACE 170—Consumer Economics
- FACE 270—Family Financial Management
- FACE 313—Economics of Consumption
- FACE 370—Family Economics
- FACE 371—The Family as a Consuming Unit
- FACE 373—Family Resource Management
- FACE 379—Problems in Family and Consumption Economics

Minimum of 6 hours each in two of the following specializations:

- Child and family
- Housing
- Foods and nutrition
- Textiles and apparel
- Human resources and family studies electives, 12 to 21 hours

Total of a minimum of .....36 hours

**AREA VII: TEACHING HOME ECONOMICS IN NONSCHOOL SETTINGS<sup>1</sup>**

Minimum of three courses from FN 130, 131, 220, 231, 320, 322

Minimum of three courses from FACE 170, 175, 270, 276, 371, 373

Minimum of three courses from HDFS 105, 106, 110, 202, 214, 215, 301, 304, 315

Minimum of three courses from TA 183, 184, 280, 380

Above human resources and family studies courses above must total a minimum of 42 hours

At least 18 hours must be at the 200 and 300 levels including two courses at the 300 level.

---

<sup>1</sup>For those wishing to enter employment in business and industry, clinics, and hospitals, etc., appropriate alternative courses will be planned by the adviser and student.

---



# College of Applied Life Studies

107 Huff Hall, 1206 South Fourth Street, Champaign, IL 61820

Departments ..... 129

Honors Program ..... 131

Curricula ..... 131

The College of Applied Life Studies prepares its graduates for scientific and professional careers in fields associated with the promotion of human health and well-being.

Three academic departments offer the Bachelor of Science, Master of Science, and Doctor of Philosophy degrees in the areas of study outlined below. In addition to career opportunities in such fields as health and/or recreation planning and administration, gerontology, sports medicine, commercial recreation, community health education, rehabilitation, corporate physical fitness, and therapeutic recreation, certain programs may serve as a first step toward careers in medicine, business, and journalism, among others. The Division of Rehabilitation-Education Services offers a Master of Science degree for those students seeking advanced study in that field.

A distinguished faculty has kept each of the academic departments at or near the top of all recent national rankings. The college will continue to provide exciting educational opportunities in research, teaching, and service leading to a wide range of career options.

## DEPARTMENTS

The Bachelor of Science degree is offered by three academic departments: Health and Safety Studies, Kinesiology, and Leisure Studies.

- The average class size is twenty-two students.
- Advising services are available in each of the academic units to assist in career selection and development of appropriate courses of study.
- Flexible curricula with numerous options are offered by all of the academic departments.
- Honors programs are available for outstanding students at the campus level.
- Practicum experiences are required within all departmental curricula. Quality placements are available throughout the United States and around the world in specific degree programs.
- Study abroad programs are available around the world.
- Students have access to the nation’s third largest academic library, including an excellent college library, reference service, interlibrary loan system, and term paper counseling.

The Division of Rehabilitation-Education Services provides students with physical or sensory impairments many support services, including orientation, mobility, and reader services for students who require them, as well as physical therapy, wheelchair sports, and other programs. These programs are designed to help them develop skills necessary as independent and productive members of society.

## Health and Safety Studies

**Community Health Education.** Examines the relationship between community health and educational interventions including the process of assisting people to adopt and maintain healthful practices, life styles, and decision-making skills. Prepares the student for roles at all levels of government as well as in health agencies, hospitals, business, and industry.

**Health Planning and Administration.** Studies factors that affect the health status of people and the health care delivery process. Prepares the student for entry-level positions in planning and administration of health programs in health care facilities, in related government agencies, and with private insurers.

## Kinesiology

**Biodynamics of Physical Activity.** The study of work output, energy, and efficiency of movement as it relates to the nature of exercise stress, the mechanics of human movement, and fitness throughout the human life span.

**Social Science of Physical Activity.** The study of the antecedents and consequences of involvement in physical activity and sport as well as the impact that physical activity and sport have upon individuals, society, and culture.

**Coordination, Control, and Skill.** The study of the mechanisms and processes involved in the acquisition and performance of human motor skills.

**Growth, Development, and Form.** The study of the growth process, the influence of physical activity on body form and composition, and the complementary influence of body development and form on human behavior and personality.

Areas of specialization at the bachelor’s level also include:

**Pedagogical Kinesiology.** The study of the organizational and instructional concepts essential for the efficient and effective conduct of physical activity programs, particularly those that relate to physical education and sport contexts.

**Therapeutic Kinesiology.** The study of movement as a therapeutic vehicle for health and wellness, particularly the prevention and rehabilitation of injury, disease, or movement dysfunction.

The department offers programs that may lead to Illinois state certification to teach physical education in grades kindergarten through twelve and six through twelve, an athletic training emphasis (NATA), and a sport coaching endorsement.

Leisure Studies

**Program Management.** Prepares students for the design, implementation, and management of leisure services and delivery systems. Includes career opportunities in public recreation systems, commercial agencies, voluntary agencies, and the armed forces.

**Therapeutic Recreation.** Delivery of leisure services to individuals with physical, mental, emotional, or social disabilities. Prepares students to work in clinical and treatment settings, long-term health care facilities, residential institutions, and community based recreation agencies.

Admission Requirements

For freshman applicants, the minimum requirements for consideration for admission are:

<i>College Preparatory Subjects</i>	<i>Semesters of Course Work</i>	
	<i>Required</i>	<i>Recommended</i>
English	6 or 7*	8
Algebra	4	4
Geometry	2	2
Trigonometry	0 or 1*	1
Advanced math		3
One foreign language	4	8
Science** (not general science)	4	
Biology		2
Chemistry		2
Physics		2
Social Studies	2	4
Total college preparatory	25	

\* A combined total of seven semesters of English and mathematics with at least six semesters in English.  
\*\* Beginning freshmen will be at a disadvantage if they have not completed at least one year each of high school biology and high school chemistry.

Once high school course work requirements are fulfilled, qualifications for admission are primarily determined by a combination of class rank at the end of the junior year with the highest ACT or SAT test score on file at the time of the admission decision. These two factors are used to predict an applicant’s likelihood of academic success, and one may help to offset the other. For example, an applicant may compensate for a low test score with a high class rank.



Transfer applicants must have attained junior standing (60 semester hours of transferable credit) by the desired date of entry. Lower-division transfer students (less than 60 semester hours) must petition for admission. Admission is competitive, based upon cumulative grade-point average. The campuswide minimum is 3.25 (A = 5.0).

**HONORS PROGRAM**

Graduation from the College of Applied Life Studies with any honors designation requires that a student must have attained at the University of Illinois at Urbana-Champaign a specific minimum cumulative grade-point average based on a minimum of 55 semester hours in residence.

- Bronze Tablet (see page 78)
- Highest Honors—4.75 to 5.0
- High Honors—4.50 to 4.74
- Honors—4.25 to 4.49

*Curricula*

**CURRICULUM IN HEALTH AND SAFETY STUDIES**

The department offers a Bachelor of Science degree in health and safety studies with areas of concentration in health education and health planning and administration. A minor in gerontology is also available. Students interested in professional health careers will find these programs compatible with those goals.

The purpose of the undergraduate program is to provide students with a broad, University general education and a department core of courses that focus on health behavior and factors that affect the health of communities. The goal is to prepare students for entry-level positions in a variety of settings, both public and private, that utilize health education processes or health information planning.

A total of 128 hours is required for the degree. This includes an 8 credit hour internship that is completed in the senior year in a setting related to the student's interest.

For further information, contact the Department of Health and Safety Studies, 121 Huff Hall, 1206 South Fourth Street, Champaign, IL 61820, (217) 333-2307.

**General Education Requirements**

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

COMMUNICATION ARTS	HOURS
RHET 105 or 108 and a speech performance course, or SPCOM 111 and 112 .....	6-7
Advanced writing <sup>1</sup> .....	3
HUMANITIES	
Including one course in philosophy .....	12
MATHEMATICS	
College algebra <sup>2</sup> (3) .....	3
Statistics .....	3
NATURAL SCIENCES	
Chemistry .....	4
Human genetics .....	3
Introduction to human physiology .....	4
Microbiology .....	3
SOCIAL SCIENCES	
Introduction to cultural anthropology .....	4
Introduction to economics .....	4
Introduction to psychology .....	4

Introduction to sociology .....	3
Total .....	56-57
Electives from above to total .....	60

<sup>1</sup>To be selected with adviser.  
<sup>2</sup> May be satisfied by appropriate score on Mathematics Placement Test.

**Professional Core Requirements**

HSS 100—Contemporary Health .....	3
HSS 101—Introduction to Public Health .....	3
HSS 111—Professional Seminar .....	0
HSS 204—Foundations of Health Behavior .....	3
HSS 210—Health Program Development .....	3
HSS 266—Tomorrow's Environment .....	3
HSS 274—Introduction to Epidemiology .....	2
HSS 280—Orientation to Internship .....	0
HSS 285—Health and Safety Studies Internship .....	8
HSS 303—Delivery of Health Care .....	3
HSS 310—Public Health Practice .....	4
HSS 321—Health Data Analysis .....	3
Total .....	35

**Areas of Concentration**

An area of concentration will be determined by the sophomore year. Areas of concentration are community health education, and health planning and administration. Specific requirements for each option are described in the following sections.

<b>COMMUNITY HEALTH EDUCATION</b>	<b>HOURS</b>
General education requirements .....	60
Professional core requirements .....	35
Area of Concentration	
FN 120—Contemporary Nutrition .....	3
HSS 200—Mental Health .....	2
HSS 225—Sexuality Program Development .....	2
HSS 243—Drug Education Planning .....	2
Total .....	9
Correlate Area #1* .....	15
Electives .....	9
Total hours required for graduation .....	128

<b>HEALTH PLANNING AND ADMINISTRATION</b>	<b>HOURS</b>
General education requirements .....	60
Professional core requirements .....	35
Area of Concentration	
HSS 357—Health Planning .....	2
HSS 358—Health Administration .....	3
Total .....	5
Correlate Area #2* .....	18
Electives .....	10
Total hours required for graduation .....	128

\*Social sciences courses from correlate areas may also be used in satisfying general education elective hours.

**Correlate Areas**

Each student completes a correlate area that is a planned program of courses taken primarily outside the department, designed to be supportive of the area of concentration. The correlate area may serve as a minor field of study, or may prepare the student for advanced study.

<b>CORRELATE AREA #1 (Community Health Education)</b>	<b>HOURS</b>
Select a minimum of 6 hours from the departmentally approved list of courses related to communication .....	6
Select a minimum of 3 hours from the departmentally approved list of courses related to health care delivery .....	3



Select a minimum of 3 hours from the departmentally approved list of courses related to organization and leadership .....	3
Select a minimum of 3 hours from the departmentally approved list of courses related to community problems .....	3
Total .....	15

<b>CORRELATE AREA #2 (Health Planning and Administration)</b>	<b>HOURS</b>
Select a minimum of 6 hours from the departmentally approved list of courses related to administration and organization .....	6
Select a minimum of 6 hours from the departmentally approved list of courses related to planning .....	6
Select a minimum of 3 hours from the departmentally approved list of courses related to accounting and economics .....	3
Select a minimum of 3 hours from the departmentally approved list of courses related to marketing and communications .....	3
Total .....	18

**TEACHER EDUCATION MINOR IN HEALTH EDUCATION**

This program is designed for students enrolled in a teacher education curriculum.

	<b>HOURS</b>
HSS 100—Contemporary Health .....	3
HSS 101—Introduction to Public Health .....	3
HSS 200—Mental Health .....	2
HSS 204—Foundations of Health Behavior .....	3
HSS 210—Health Program Development .....	3
HSS 225—Sexuality Program Development .....	2
HSS 243—Drug Education Planning .....	2
HSS 274—Introduction to Epidemiology .....	2
HSS 312—Health and Safety Education in the Elementary School .....	3
Total .....	23

**CURRICULUM IN KINESIOLOGY**

The faculty of the Department of Kinesiology focuses on the study of human movement in a range of physical activities including athletics, communication, dance, exercise, play, sport, and work. The departmental programs study humans as physically active organisms, with special reference to human performance and the development of motor skills, together with the impact that engagement in physical activities has on individuals throughout the life span. The undergraduate programs provide the scholarly basis for a variety of careers related to kinesiology in the arts, education, health, industry, military, and sport.

This curriculum is designed to allow students to develop programs of study, in consultation with an adviser, that will provide the knowledge and understanding essential for human movement and sport careers in either public or private agencies or serve as a foundation for graduate study or professional studies. The 128 hours required for graduation include prescribed courses for all students as well as requirements determined by the various areas of concentration and electives selected by the student. The first two years of this curriculum provide a foundation for the areas of concentration but also allow some variations according to the interests of individual students. The courses for the third and fourth years are largely determined by the area of concentration selected and the correlate area supporting the area of concentration.

A student who desires certification as a teacher or athletic trainer can satisfy the necessary requirements by appropriate selection of courses within the areas of concentration and correlate areas. Students seeking such certification should ask the undergraduate academic adviser about program admission criteria and certification requirements. The Department of Kinesiology also offers coaching endorsements to all UIUC students regardless of their degree programs.

Students are advised that the curriculum is currently being reviewed and revised. Therefore, it is important that the undergraduate academic adviser be contacted for the most current information.

Further information on careers in kinesiology is available from the undergraduate academic adviser, Department of Kinesiology, 155 Freer Hall, 906 South Goodwin Avenue, Urbana, IL 61801.

## General Education Requirements for All Students\*

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

<b>COMMUNICATION ARTS</b>	<b>HOURS</b>
SPCOM 111 and 112, or RHET 105 or 108 and a speech performance elective .....	6-7
Communication arts electives .....	6-7
Total .....	13
<b>HUMANITIES</b>	
Total .....	9
<b>MATHEMATICS</b>	
Two courses, MATH 112 or above .....	5-8
<b>NATURAL SCIENCES</b>	
Introduction to human physiology .....	4
Functional human anatomy .....	5
Total .....	9
<b>SOCIAL SCIENCES</b>	
Total .....	9
<b>ELECTIVES</b>	
Must be selected from the five areas listed above .....	9-12
Total .....	57

## Professional Core Requirements for All Students\*

KINES 130—Analysis and Performance of Basic Movement Skills .....	2
KINES 131—Movement Skills: Fitness .....	1
KINES 132—Movement Skills: Swimming .....	1
KINES 133—Movement Skills: Dance .....	1
KINES 134—Movement Skills: Gymnastics .....	1
KINES 135—Movement Skills: Field Activities .....	1
KINES 136—Movement Skills: Racquet Activities .....	1
KINES 140—Social Scientific Bases of Sport .....	3
KINES 150—Bioscientific Foundations of Human Movement .....	3
KINES 160—Physical Education as a Profession .....	2
KINES 255—Biomechanical Analysis of Human Movement .....	3
KINES 257—Coordination, Control, and Skill .....	3
KINES 280—Principles of Evaluation and Assessment .....	3
Total .....	25

## Areas of Concentration\*

In addition to taking the professional core requirements for all students, each student will declare, in consultation with the academic adviser, an area of concentration in kinesiology no later than the first semester of the junior year. The areas of concentration are social science of sport, bioscience, curriculum and instruction, and personalized area of concentration.

<b>SOCIAL SCIENCE OF SPORT</b>	<b>HOURS</b>
KINES 244—Anthropology of Play, or KINES 247—Introduction to Sport Psychology .....	3
KINES 249—Sport and Modern Society .....	3
KINES 285—Supervised Experiences in Kinesiological Research, or KINES 287—Supervised Experiences in the Agency Setting .....	3
KINES 349—Sociology of Sport .....	3
Select 6 hours from the departmentally approved list of social science of sport electives .....	6
Total .....	18

\*The curriculum in kinesiology is being revised. Students should consult the undergraduate academic adviser for the most current information.

## BIOSCIENCE

KINES 252—Bioenergetics of Human Movement .....	3
KINES 285—Supervised Experiences in Kinesiological Research, or KINES 287—Supervised Experiences in the Agency Setting .....	3



KINES 354—Growth and Physical Development of Children .....	3
KINES 355—Cinematography in Kinesiology, or KINES 356—Electromyographic Kinesiology .....	3
Select 6 hours from the departmentally approved list of bioscience electives .....	6
Total .....	18

CURRICULUM AND INSTRUCTION

KINES 262—Motor Development in Childhood, or KINES 354—Growth and Physical Development of Children .....	3
KINES 263—Physical Education Curriculum .....	3
KINES 267—Adapted Physical Education .....	3
KINES 273—Instructional Strategies in Physical Education .....	3
KINES 286—Supervised Experiences in the Common School .....	3
Select 3 hours from the departmentally approved list of curriculum and instruction electives .....	3
Total .....	18

Personalized Area of Concentration

The personalized area of concentration provides the student with an opportunity to design and follow an individualized series of courses stressing greater flexibility (depth and breadth) than that available in the bioscience, curriculum and instruction, or social science of sport areas of concentration. The personalized area of concentration will allow a student whose academic interests span more than one established area of concentration to design a program of study not currently available through the other areas of concentration. In accordance with departmental regulations concerning the development and approval of personalized areas of instruction, the student will develop a series of kinesiology courses (at least 18 hours of credit) designed to complement a specific educational goal.

Correlate Areas\*

Each student will complete a correlate area that is a plan of study designed to support the area of concentration. These courses must be taken outside the Department of Kinesiology (with the exception that one 300-level kinesiology course may be included when pertinent to the student’s goals). The correlate area may serve as a minor field of study, may satisfy teacher education requirements, or may prepare the student for advanced study.

\*The curriculum in kinesiology is being revised. Students should consult the undergraduate academic adviser for the most current information.

CORRELATE AREA #1

The student will develop, in consultation with the academic adviser, a series of courses (at least 18 semester hours) designed to support the area of concentration. These courses require approval by a departmental faculty committee charged with this responsibility.

CORRELATE AREA #2 (Teacher Certification K-12) <sup>1</sup>	HOURS
EPS 201—Foundations of American Education .....	3
EDPSY 236—Child Development for Elementary Teachers, or EDPSY 211—Educational Psychology ..	3
C&I 240—Secondary Education in the United States .....	2
ED PR 238—Educational Practice for Special Fields in Elementary Schools .....	8
ED PR 242—Educational Practice in Secondary Education .....	8
Total .....	24

CORRELATE AREA #3 (Teacher Certification 6-12) <sup>1</sup>	HOURS
EPS 201—Foundations of American Education .....	3
EDPSY 211—Educational Psychology .....	3
C&I 240—Secondary Education in the United States .....	2
ED PR 238—Educational Practice for Special Fields in Elementary Schools .....	8
ED PR 242—Educational Practice in Secondary Education .....	8
Total .....	24

Electives .....	4-10
Total hours required for graduation .....	128

<sup>1</sup>Students who want to be certified to teach in the public schools must select the curriculum and instruction area of concentration and must have 3.5 or higher University of Illinois at Urbana-Champaign and cumulative grade-point averages. Students are advised to consult pages 87 to 92 for requirements common to all teacher certification programs.

General Education Requirements for All Kinesiology Students Seeking Teacher Certification<sup>1</sup>

Students pursuing teacher certification in physical education must complete these requirements with courses chosen from the Council on Teacher Education approved list. Consult the undergraduate adviser for specifics.

	HOURS
<b>COMMUNICATIONS SKILLS</b> .....	<b>9-10</b>
RHET 105 or 108 and a speech performance course	
or	
SPCOM 111 AND 112 .....	6-7
An advanced writing course .....	3
<b>NATURAL SCIENCE</b> .....	<b>12-14</b>
Introduction to human physiology .....	4
Functional human anatomy .....	5
At least one course in physical sciences from the departmental approved list .....	3-5
<b>COMPUTER UNDERSTANDING</b> .....	<b>3</b>
Select one course from the departmental approved list	
<b>MATHEMATICS</b> .....	<b>4-6</b>
Select one or two courses from the departmental approved list	
<b>HUMANITIES<sup>2</sup></b> .....	<b>9</b>
At least three courses in at least two areas (the arts, foreign languages, history, literature, non-Western cultures, philosophy)	
<b>BEHAVIORAL AND SOCIAL SCIENCES<sup>3</sup></b> .....	<b>9</b>
At least three courses in at least two areas (anthropology, economics, non-Western societies, political science, psychology, sociology)	
<b>ELECTIVES<sup>4</sup></b> .....	<b>3-8</b>
Must be selected from categories listed above	
<b>TOTAL</b> .....	<b>no less than 54<sup>5</sup></b>

<sup>1</sup>Pending final approval.  
<sup>2</sup>Students pursuing certification must complete American history, literature, and one additional humanities course from the council-approved list.  
<sup>3</sup>Students pursuing certification must complete POL S 150, PSYCH 100, and one additional social sciences course from the council-approved list.  
<sup>4</sup>Students pursuing certification will need to complete two courses in humanities from the council-approved list. One course must be in non-Western cultures unless this requirement has already been completed as part of the behavioral and social sciences requirement.  
<sup>5</sup>Fifty-four hours is greater than the total achieved by adding the minimum number of hours listed in each separate general education section; however, the departmental minimum requirement is 54 hours.

TEACHER EDUCATION MINOR IN PHYSICAL EDUCATION

This program is designed for students enrolled in a teacher education curriculum other than in the Department of Kinesiology.

REQUIRED COURSES	HOURS
KINES 130—Analysis and Performance of Basic Movement Skills .....	2
KINES 150—Bioscientific Foundations of Human Movement .....	3
KINES 257—Coordination, Control, and Skill .....	3
KINES 263—Physical Education Curriculum .....	3
KINES 267—Adapted Physical Education .....	3
KINES 273—Instructional Strategies in Physical Education .....	3
KINES 131-136—Movement Skills (choose at least one each from dance and/or rhythmic activities; individual-dual activities; team sports) (a minimum of five courses needed) .....	5
Total .....	22

CURRICULUM IN LEISURE STUDIES

This curriculum prepares students to design, manage, and deliver leisure services to a variety of populations through diverse agency settings. A broad general education is emphasized and complemented with a core of professional courses. Students may elect from two options:



- Program management, which prepares students to manage leisure programs in public or private agencies, and
- Therapeutic recreation, for students who want to design and deliver leisure programs to individuals with disabilities.

All options require 126 credit hours for graduation and the completion of the Professional Laboratory Experience Program.

**Professional Laboratory Experience Program**

All students in the Department of Leisure Studies must satisfactorily complete the Professional Laboratory Experience Program prior to graduation. The program is designed to augment formal classroom instruction with active experiential learning under the guidance of an agency-based supervisor. The program consists of two courses: LEIST 280—Orientation to Practicum, and LEIST 284—Leisure Studies Practicum.

Students must have achieved senior standing to enroll in the Professional Laboratory Experience Program, have a minimum cumulative grade-point average of 3.0, and be in good standing with the University. Depending on the option selected by the student, other specific course prerequisites may need to be fulfilled before the student can be accepted into the program. The college statement on supervised field experience applies to all students participating in the Professional Laboratory Experience Program.

**Practicum Related Courses**

Students should register for LEIST 280—Orientation to Practicum after achieving junior standing. As a part of this course, a student must document that he or she has completed a minimum of 320 hours of actual fieldwork experience in a leisure service agency in a face-to-face service delivery capacity. During this course, students will make final arrangements for completing LEIST 284—Leisure Studies Practicum.

The practicum may be taken only after the student has achieved senior standing (completed 90 semester hours), satisfactorily completed LEIST 280, and fulfilled other option prerequisites. The professional field practicum is designed to give the student guided professional experience prior to graduation. LEIST 284 can be taken only in agencies that have been approved and contracted for this program. The practicum includes a minimum of 640 clock hours of experience in a nonpaid, internship-type position. No more than 40 hours per week may be applied toward this total.

The last day for a student to apply for placement into a practicum for an academic semester is Friday of the third week of the preceding academic semester. The student will be cleared for placement by his or her academic adviser and must then make application to the coordinator of the Professional Laboratory Experience Program for a practicum assignment.

A student who is on academic or disciplinary probation or on dropped status is not eligible to complete a practicum during the semester in which the probationary or dropped status is in effect and is not permitted to engage in practicum activities.

A student should anticipate and plan for an off-campus assignment during the semester in which he or she will be taking the practicum. Only a limited number of assignments for practicums are available in the vicinity of campus. It is not currently possible to arrange local assignments for all whose needs would justify such assignments. For most students, additional expense will be incurred during the semester in which the practicum is taken.

**General Education Requirements**

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

**VERBAL COMMUNICATION**

**HOURS**

SPCOM 101—Principles of Effective Speaking, or SPCOM 113—Group Discussion and Conference Leadership .....3

**WRITTEN COMMUNICATION**

RHET 105—Principles of Composition, or RHET 108—Forms of Composition .....4  
RHET 133—Principles of Composition, or RHET 143—Intermediate Expository Writing .....3

<b>ACCOUNTING, ECONOMICS, MATHEMATICS, OR STATISTICS</b> .....	<b>3</b>
Students in the program management option who select Correlate Area #3 should select ECON 101.	
<b>ACTIVITY COURSES</b> .....	<b>4</b>
<b>NATURAL SCIENCES</b> .....	<b>8-9</b>
Students in the therapeutic recreation option must select PHYSL 103 and CSB 234.	
<b>SOCIAL SCIENCES</b> .....	<b>15</b>
Students must select PSYCH 100, 103, or 105 and additional social sciences electives	
<b>HUMANITIES</b>	
Humanities electives .....	11
Total .....	51-52

<b>Professional Core Requirements</b>	<b>HOURS</b>
LEIST 100—Introduction to Leisure Studies .....	3
LEIST 110—Foundations for Delivery of Leisure Services .....	2
LEIST 130—Introduction to Therapeutic Recreation .....	2
LEIST 210—Theories and Methods of Supervision .....	3
LEIST 280—Orientation to Practicum .....	0
LEIST 284—Leisure Studies Practicum .....	12
LEIST 290—Research in Leisure Studies .....	3
LEIST 310—Introduction to Administration .....	3
Total .....	28

**Areas of Concentration**

<b>PROGRAM MANAGEMENT OPTION</b>	<b>HOURS</b>
General education requirements .....	51-52
Professional core requirements .....	28
LEIST 199K—Leisure and Human Development .....	3
LEIST 200—Leadership in Leisure Delivery Systems .....	3
LEIST 215—Recreation Program Development .....	3
SOC 276 or UP 101 .....	3
LEIST 332—Program Design and Evaluation in Recreation .....	3
Total .....	15
Correlate Area #1 or #3 .....	12
Electives .....	19-20
Total hours required for graduation .....	126

<b>THERAPEUTIC RECREATION OPTION</b>	<b>HOURS</b>
General education requirements .....	52
Professional core requirements .....	28
LEIST 230—Clinical Aspects of Therapeutic Recreation .....	4
LEIST 232—Principles of Therapeutic Recreation .....	3
LEIST 231—Leisure and the Aging, or LEIST 233—Recreation for the Physically Disabled, or LEIST 234—Recreation for the Mentally Ill and Emotionally Disturbed, or LEIST 235—Recreation for the Developmentally Disabled (a minimum of one course from this list) ..	3
LEIST 239—Seminar in Therapeutic Recreation .....	1
LEIST 331—Facilitation Techniques and Leisure Education .....	3
LEIST 332—Program Design and Evaluation in Recreation .....	3
Total .....	17
Correlate Area #2 .....	9-11
Electives .....	18-20
Total hours required for graduation .....	126

**Correlate Areas**

A correlate area is a planned program of courses taken outside the department that is designed to support the student’s area of concentration. In some instances, class substitution may be allowed with adviser approval.



**CORRELATE AREA #1 (Program Management Option)**

LA 226—Principles of Park Design .....	2
Eight hours to be selected with adviser from a list of courses approved by the department .....	8-10
Total .....	10-12

**CORRELATE AREA #2 (Therapeutic Recreation Option)**

KINES 255—Biomechanical Analysis of Human Movement .....	3
HDFS 105—Introduction to Human Development .....	3
PSYCH 238—Abnormal Psychology .....	3
(Students are required to demonstrate First Aid Certification prior to internship placement) .....	2
Total .....	9-11

**CORRELATE AREA #3 (Program Management Option)**

Select (or choose with the help of an adviser) four from the list below *	
ACCY 201—Principles of Accounting I .....	3
ADV 281—Introduction to Advertising .....	3
CS 105—Introduction to Computers and Their Application to Business and Commerce, or CS 106—Introduction to Computers for the Nontechnical Major	
B ADM 200—The Legal Environment of Business, or B ADM 202—Principles of Marketing .....	3
Total .....	12

\* Select ECON 101 or a statistics course under General Education Requirements

# Institute of Aviation

Willard Airport, One Airport Road, Savoy, IL 61874

Admission Requirements ..... 140

General Education Requirements ..... 140

Curricula ..... 141

The Institute of Aviation is responsible for the promotion and correlation of education and research activities related to aviation at the University. Its director has the advice and assistance of an executive committee. The institute holds Federal Aviation Administration (FAA) Airman Examining (Pilot) Agency Certificate Number 1, which permits it to issue pilot certificates and ratings to its graduates on behalf of the FAA. A professional pilot curriculum includes training from the private pilot level to the airline-transport pilot level.

The aircraft maintenance technology curriculum prepares students for the FAA mechanic certificate with airframe and powerplant ratings.

The student who wishes to become a professional pilot may also elect the professional pilot/ aircraft maintenance technology curriculum, which permits substitution of flight courses for specified maintenance courses in each semester of the aircraft maintenance technology curriculum, so the student can work toward pilot certification and maintenance certification simultaneously.

Typically, new freshmen are accepted for admission only in August, but a few students are accepted for the spring semester. Transfer to the Institute of Aviation from within the University may be accomplished as space permits.

A graduating institute student may transfer to any degree-granting division of the University to complete requirements for a degree in that division. This may require from four to six additional semesters. A University student outside the Institute of Aviation may elect flight courses with the permission of his or her department and the permission of the Institute of Aviation.

Special fees ranging from \$900 to \$3,748 are charged for a course involving flight training in addition to the estimated costs listed in Table 3 on page 48. These fees are subject to change as operating costs change.

The institute's Aviation Research Laboratory conducts interdisciplinary research in many areas related to flight. The institute manages Willard Airport, located six miles southwest of the Urbana-Champaign campus. The airport also provides the University and the community with excellent air transportation facilities.

## ADMISSION REQUIREMENTS

Applicants must meet general University requirements as well as those specified by the Institute of Aviation. A personal interview and special testing session are normally required prior to an admission decision, but arrangements can be made for applicants unable to visit the Institute of Aviation. Additional units in physics, mathematics, and the social sciences are recommended.

## GENERAL EDUCATION REQUIREMENTS

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices or advisers.



Curricula

PROFESSIONAL PILOT CURRICULUM<sup>1</sup>

FIRST YEAR	
FIRST SEMESTER	HOURS
AVI 101—Private Pilot I .....	3
ECON 101—Introduction to Economics .....	4
HIST 111—History of Western Civilization to 1815, or HIST 151- -History of the United States to 1877 .....	4
SPCOM 111—Verbal Communication .....	3
Free elective .....	3
Total .....	17

SECOND YEAR	
FIRST SEMESTER	HOURS
AVI 130—Commercial-Instrument I .....	3
MATH 134—Calculus for Social Scientists I .....	4
Humanities elective .....	3
Free electives .....	6
Total .....	16

FIRST YEAR	
SECOND SEMESTER	HOURS
AVI 120—Private Pilot II .....	3
MATH 125—Elementary Linear Algebra with Applications .....	3
HIST 112—History of Western Civilization, 1815 to the Present, or HIST 152—History of the United States, 1877 to the Present .....	4
SPCOM 112—Verbal Communication .....	3
Free elective .....	3
Total .....	16

SECOND YEAR	
SECOND SEMESTER	HOURS
AVI 140—Commercial-Instrument II .....	3
CS 105—Introduction to Computers and Their Application to Business and Commerce .....	3
Humanities electives .....	4
Free electives .....	6
Total .....	16

<sup>1</sup>Other elective options are available. A student interested in a B.A. or B.S. degree in addition to the aviation curriculum should explore options combining this curriculum with curricula in business administration, agricultural economics, education, journalism, psychology, etc. A brochure listing sample programs is available from the Institute of Aviation upon request.

- NOTES:
- HIST 111 and 112, or HIST 151 and 152 should be chosen.
  - Humanities electives should be chosen to comply with University general education requirements.
  - Two additional flight courses, AVI 200 and 210 must be taken to complete requirements for the commercial certificate with instrument rating.

AIRCRAFT MAINTENANCE TECHNOLOGY CURRICULUM

FIRST YEAR	
FIRST SEMESTER	HOURS
AVI 142—Reciprocating Powerplant Theory .....	3
AVI 143—Aircraft Materials and Processes I .....	3
AVI 144—Turbine Powerplant Theory .....	3
AVI 145—Basic Aircraft Electrical Systems .....	3
AVI 154—Powerplant systems II .....	3
RHET 105—Principles of Composition, RHET 108—Forms of Composition, or SPCOM 111-112 Sequence <sup>1</sup> .....	4
Total .....	19

SECOND YEAR	
FIRST SEMESTER	HOURS
AVI 163—Aircraft Materials and Processes III ....	3
AVI 165—Aircraft Fabricating Processes I .....	4
AVI 167—Aircraft Fabricating Processes II .....	3
AVI 169—Aircraft Systems I .....	4
AVI 170—Aircraft Systems II .....	5
Total .....	19

FIRST YEAR	
SECOND SEMESTER	HOURS
AVI 147—Introduction to Federal Aviation Regulations .....	3
AVI 152—Powerplant Systems I .....	4
AVI 153—Aircraft Materials and Processes II ....	2
AVI 155—Aerodynamics and Load Planning .....	3
AVI 156—Powerplant Systems III .....	3
GE 105—Elements of Drawing .....	3
Total <sup>3</sup> .....	18

SECOND YEAR	
SECOND SEMESTER	HOURS
AVI 157—Powerplant Conditioning and Testing .	7
AVI 159—Powerplant Maintenance and Inspection Systems .....	2
AVI 172—Aircraft Systems III .....	3
AVI 174—Aircraft Assembly and Inspection .....	5
AVI 179—Airframe Maintenance and Inspection Systems .....	2
Total <sup>3</sup> .....	19

COMBINED PROFESSIONAL PILOT/AIRCRAFT MAINTENANCE  
TECHNOLOGY CURRICULUM<sup>2</sup>

FIRST YEAR

FIRST SEMESTER	HOURS
AVI 101—Private Pilot I .....	3
AVI 142—Reciprocating Powerplant Theory .....	3
AVI 143—Aircraft Materials and Processes I .....	3
AVI 144—Turbine Powerplant Theory .....	3
AVI 145—Basic Aircraft Electrical Systems .....	3
RHET 105—Principles of Composition, RHET 108—Forms of Composition, or SPCOM 111-112 sequence <sup>1</sup> .....	4
Total .....	19

SECOND YEAR<sup>4</sup>

FIRST SEMESTER	HOURS
AVI 130—Commercial-Instrument I .....	3
AVI 154—Powerplant Systems II .....	3
AVI 163—Aircraft Materials and Processes III ....	3
AVI 165—Aircraft Fabricating Processes I .....	4
AVI 167—Aircraft Fabricating Processes II .....	3
Total .....	16

THIRD YEAR

FIRST SEMESTER	HOURS
AVI 200—Commercial-Instrument III .....	5
AVI 169—Aircraft Systems I .....	4
AVI 170—Aircraft Systems II .....	5
Total .....	14

FIRST YEAR

SECOND SEMESTER	HOURS
AVI 120—Private Pilot II .....	3
AVI 147—Introduction to Federal Aviation Regulations .....	3
AVI 152—Powerplant Systems I .....	4
AVI 153—Aircraft Materials and Processes II ....	2
AVI 155—Aerodynamics and Load Planning .....	3
AVI 156—Powerplant Systems III .....	3
Total <sup>3</sup> .....	18

SECOND YEAR

SECOND SEMESTER	HOURS
AVI 140—Commercial-Instrument II .....	3
AVI 157—Powerplant Conditioning and Testing .	7
AVI 159—Powerplant Maintenance and Inspection Systems .....	2
GE 105—Elements of Drawing .....	3
Total <sup>3</sup> .....	15

THIRD YEAR

SECOND SEMESTER	HOURS
AVI 210—Commercial-Instrument IV .....	5
AVI 172—Aircraft Systems III .....	3
AVI 174—Aircraft Assembly and Inspection .....	5
AVI 179—Airframe Maintenance and Inspection Systems .....	2
Total .....	15

<sup>1</sup>Select from rhetoric or the speech communication sequence based on career/degree objectives.  
<sup>2</sup>Students register in curriculum in aircraft maintenance technology.  
<sup>3</sup>Students who prefer to attend summer sessions are encouraged to obtain college requirements in mathematics, science, and electives, or they may obtain additional flight courses at the institute.  
<sup>4</sup>Students may qualify to test for FAA powerplant mechanic certification at the end of the second year.

NOTE: Students planning to transfer to a baccalaureate program should work with an adviser to select up to 22 hours of degree-oriented electives while at the institute.



# College of Commerce and Business Administration

214 David Kinley Hall, 1407 West Gregory Drive, Urbana, IL 61801

Departments and Curricula .....	143
Admission Requirements .....	143
Honors Programs .....	144
Graduation Requirements .....	144
General Education Sequence Requirements .....	144
Mathematics Requirement .....	145
Curricula .....	145

The purpose of the College of Commerce and Business Administration is to provide an educational experience that will help students develop their potentialities for leadership and service in business, in government, and in teaching and research. The undergraduate curricula provide a study of the basic aspects of business and preparation for careers in fields such as accounting, business management, banking, insurance, and marketing. Students should, however, expect to serve apprenticeships in the fields they enter if they aspire to higher positions.

The curricula, leading to the Bachelor of Science degrees in the various degree programs in business and economics, are based on four years of college work. Students are required to elect courses in other colleges of the University including courses in mathematics, rhetoric, literature, speech, and the social sciences, and to secure as liberal an education as possible to avoid the narrowing effects of overspecialization. Through a cooperative arrangement with the College of Liberal Arts and Sciences, students in that college may major in economics or finance.

The College of Commerce and Business Administration offers graduate and professional programs to the student with a bachelor's degree in one of the areas of business and economics, or in a nonbusiness area such as liberal arts, science, or engineering. Detailed information on graduate programs may be obtained from the Graduate College.

## DEPARTMENTS AND CURRICULA

Undergraduate instruction in the College of Commerce and Business Administration is organized under the Departments of Accountancy, Business Administration, Economics, and Finance. Each of these departments offers courses that provide a field of concentration a student may elect. These curricula lead to Bachelor of Science degrees in the various fields of study in the college and are designed to encourage each student to develop fully his or her intellectual capacity. Each curriculum introduces the students to each major subject area in the college and provides them with the opportunity to major in the areas of their choice.

## ADMISSION REQUIREMENTS

Applicants must meet general University requirements as well as those specified by the College of Commerce and Business Administration.

Students transferring from other colleges will not be excused from the entrance requirements unless they have demonstrated proficiency in the areas in which they are deficient.

## Mathematics Placement Test

Students without college credit in algebra are required to take the Mathematics Placement Test before registering in the college. The results of the test are used to place students in MATH 112 or to exempt them from college algebra and allow them to enroll in MATH 125 or the equivalent, which is required for graduation.

The student who enters with college credit in algebra may proceed directly to courses beyond college algebra required by the college for graduation.

# HONORS PROGRAMS

## Honors at Graduation

Honors, designated on diplomas, are awarded to superior students as follows: for graduation with honors, a minimum grade-point average of 4.50 (A = 5.0) in all courses accepted toward the student's degree; for graduation with high honors, a minimum grade-point average of 4.75 in all courses accepted toward the degree; and for graduation with highest honors, a minimum grade-point average of 4.90 in all courses accepted toward the degree.

## Edmund J. James Scholars

For information regarding the James Scholar program, see page 37.

## Dean's List

For information regarding the Dean's List, see page 78.

# GRADUATION REQUIREMENTS

Students in the College of Commerce and Business Administration who meet the University's requirements with reference to registration, residence, and fees, and who maintain satisfactory scholastic records in the college, are awarded degrees appropriate to their curricula.

Each candidate for a degree must have a 3.0 (A = 5.0) grade-point average or above for all courses counted toward graduation, a 3.0 grade-point average or above for all courses taken at this University, and a 3.0 grade-point average or above for all courses taken in the field of concentration.

Each student may select only one major field of concentration.

Continuing students advance enroll for the next semester in November and April of each academic year. New students may advance enroll during the summer for each fall semester. Information may be obtained from the Office of Admissions and Records, University of Illinois at Urbana-Champaign, 177 Henry Administration Building, Urbana, IL 61801.

Faculty advisers are available during the registration period each semester to help students plan their academic programs.

Students are responsible for meeting the requirements for graduation. Therefore, students should familiarize themselves with the requirements listed in this catalog and should refer to them each time they plan their programs.

# GENERAL EDUCATION SEQUENCE REQUIREMENTS

Students must complete at least five courses from each of the following areas.

## Area I

Literature and the arts .....	1-2 courses
Historical and philosophical perspectives .....	1-2 courses
Behavioral science .....	1-2 courses
Social perspectives .....	1-2 courses
Non-Western cultures and traditions .....	1 course

**Minimum of 5 courses**

## Area II

Physical science .....	1-2 courses
Biological science .....	1-2 courses
Mathematics .....	0-2 courses
Science and society .....	0-1 course

**Minimum of 5 courses**

The following regulations apply:

- Business administration majors must select PSYCH 100 and 201 for the behavioral science requirement in Area II.
- The credit-no credit option may be used for any general education course except PSYCH 201 for business administration majors.
- See the college office (214 David Kinley Hall) for a specific list of courses that meet the general education requirements.



The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting the college's Undergraduate Affairs Office in 214 David Kinley Hall.

MATHEMATICS REQUIREMENT

Any one of the following sequences meets the College of Commerce and Business Administration requirement: MATH 135 (5 semester hours); MATH 120 and 132 (8 semester hours); MATH 125 and 134 (7 semester hours). A new student need only select which mathematics sequence to enter. Decisions on how far to go in a sequence can be made later as the student gains experience and firms up career objectives.

The most appropriate mathematics sequence for a student depends on his or her background, interest, motivation, and objectives. Background can be evaluated in terms of mathematics courses already completed and the student's score on the Mathematics Placement Test. Interest, motivation, and objectives must be determined by the student. Three basic sequences are open to the student. They are:

- MATH 135. A demanding course requiring a previous analytic geometry course. It should be chosen by students whose interests and objectives require strong mathematics.
- MATH 120 and 132. This sequence is appropriate for students whose background is good but who have not had analytic geometry or who feel a somewhat less demanding sequence is preferable.
- MATH 125 and 134. This sequence provides the student with a good background, but since the pace is slower it may not sufficiently challenge the very good or previously well prepared student.

Curricula

Typically, students must register for not fewer than 12 hours or more than 18 hours in each semester. Students should take mathematics, economics, and accountancy courses in the semesters indicated in the sample schedule of courses. The computer science course must be taken during the first year. A required course that is failed must be repeated the next semester.

A student who has earned fewer than 30 hours of credit is required to have his or her program for the semester approved by an adviser in the college office.

Up to 4 hours of credit in basic physical education may be counted in the 124 hours necessary for graduation. Physical education grades are counted in the graduation grade-point average.

UNIVERSITY REQUIREMENTS	HOURS
RHET 105 or 108 - Composition <sup>1</sup> .....	4

GENERAL EDUCATION REQUIREMENTS<sup>2</sup>

Area I: (minimum of 5 courses)	
Literature and the arts .....	1-2 courses
Historical and philosophical perspectives .....	1-2 courses
Social perspectives .....	1-2 courses
Non-western cultures and traditions .....	1 course
Area II: (minimum of 5 courses)	
Physical science .....	1-2 courses
Biological science .....	1-2 courses
Behavioral science .....	1-2 courses
Mathematics .....	0-2 courses
Science and society .....	0-1 course
Minimum of 30 hours	

BUSINESS COMMUNICATIONS REQUIREMENTS	HOURS
Business and Technical Writing or Advanced Rhetoric (above RHET 108) .....	3
SPCOM 101—Principles of Effective Speaking <sup>1</sup> .....	3

BUSINESS CORE REQUIREMENTS <sup>3,4</sup>	HOURS
ACCY 201 and 202—Principles of Accounting I and II .....	6
B ADM 200—The Legal Environment of Business .....	3
B ADM 202—Principles of Marketing .....	3
B ADM 210 <sup>5</sup> —Management and Organizational Behavior .....	3
B ADM 389—Business Policy .....	3
CS 105—Introduction to Computers and Their Application to Business and Commerce .....	3

ECON 102 and 103—Microeconomic and Macroeconomic Principles .....	6
ECON 172 and 173—Economic Statistics I and II .....	6
ECON 300—Intermediate Microeconomic Theory .....	3
FIN 254—Introduction to Business Financial Management .....	3
MATH 125—Elementary Linear Algebra with Applications and MATH 134 <sup>6</sup> —Calculus for Social Scientists I .....	7
TOTAL BUSINESS CORE REQUIREMENTS .....	44-47 hours

**MAJOR**

Courses to yield a total of ..... 15-21 hours

**ELECTIVES<sup>2</sup>** ..... Minimum of 17 hours

**TOTAL FOR THE DEGREE** ..... Minimum of 124 hours

**RESIDENCY REQUIREMENT**

Students must spend either the first three years, earning not fewer than 90 semester hours, or the last year (two semesters, or the equivalent), earning not fewer than 30 semester hours, in residence on the Urbana-Champaign campus, uninterrupted by any work in another institution.

Transfers from community or junior colleges must, after attaining junior standing, earn at the University of Illinois or any other approved four-year institution, at least 60 semester hours acceptable toward their degree.

<sup>1</sup>SPCOM 111 and 112 may be substituted for RHET 105 or 108 and SPCOM 101.  
<sup>2</sup>All general education requirements and all electives may be taken under the credit-no credit option. Business administration majors may not take PSYCH 201 under the credit-no credit option.  
<sup>3</sup>Business core courses may be used to fulfill certain general education requirements.  
<sup>4</sup>Business core requirements are being revised. For information on current requirements, contact 214 David Kinley Hall.  
<sup>5</sup>This course includes limited voluntary participation as a subject in experiments.  
<sup>6</sup>MATH 135, or MATH 120 and 132 may be substituted for MATH 125 and 134. (See college mathematics requirement on page 145.)

<b>FIRST YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
ECON 102 .....	3
MATH 125 .....	3
CS 105.....	3
RHET 105 or 108 .....	4
General education .....	3
Total .....	16

<b>SECOND YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
ACCY 201 .....	3
ECON 172 .....	3
Advanced rhetoric .....	3
General education .....	6
Total .....	15

<b>THIRD YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
FIN 254 .....	3
ECON 300 .....	3
B ADM 202 or 210 .....	3
Major or elective .....	3
Elective .....	4
Total .....	16

<b>FOURTH YEAR</b>	
<b>FIRST SEMESTER</b>	<b>HOURS</b>
Major and electives .....	16
Total .....	16

<b>FIRST YEAR</b>	
<b>SECOND SEMESTER</b>	
ECON 103 .....	3
MATH 134 .....	4
SPCOM 101 .....	3
General education .....	6
Total .....	16

<b>SECOND YEAR</b>	
<b>SECOND SEMESTER</b>	
ACCY 202 .....	3
ECON 173 .....	3
General education .....	3
Major, general education, or elective .....	6
Total .....	15

<b>THIRD YEAR</b>	
<b>SECOND SEMESTER</b>	
B ADM 200 .....	3
B ADM 202 OR 210 .....	3
Major and elective .....	9
Total .....	15

<b>FOURTH YEAR</b>	
<b>SECOND SEMESTER</b>	
Major and electives .....	12
B ADM 389 .....	3
Total .....	15



## CURRICULUM IN ACCOUNTANCY

### For the Degree of Bachelor of Science in Accountancy

In economically advanced societies, accounting plays an increasingly important role. As organizations and societies grow in size and complexity, there is a growing need for relevant and reliable quantitative information about their progress and status. This information is an important aid to business managers, investors, and others in (1) planning decisions regarding the use of resources (financial, physical, and human); (2) controlling decisions regarding actions to accomplish the plans; and (3) evaluating decisions regarding the actual performance. The accountant assists in identifying the information appropriate for a particular decision, participates in the accumulation of this information, and is responsible for reporting and interpreting it. The providing of such information is important to those who manage economic activity as well as to those interested in the results. Accountants perform this function in both business and nonbusiness organizations.

Closely allied to accounting are the fields of information systems, auditing, and taxation. Each field requires additional education. Accountants who specialize in information systems are concerned with the design and control of the systems that provide the information. Accountants who specialize in auditing are concerned with verifying the propriety of the information and may attest to its reliability in reports accompanying those issued by management of their accountability for the use of resources. Accountants who specialize in taxation assist in tax planning, return preparation, and the development of regulations. These accountants are employed inside organizations, by governmental units, and by independent public accounting firms.

Study in accountancy is offered in seven areas: financial accounting, managerial accounting, international accounting, not-for-profit accounting, taxation, information systems, and auditing. Courses are available in each of these areas at both the undergraduate and graduate levels.

Minimum requirements for the Bachelor of Science degree in accountancy are ACCY 211, 221, 311, and 331; and three additional accountancy courses. ACCY 199, up to 4 hours, may count as one of these additional courses. Additional credit in ACCY 199 will be allowed only with the permission of the department head.

Accountancy courses may not be taken on a credit-no credit basis. A limit of 33 hours of accountancy courses may be counted toward the Bachelor of Science degree in accountancy.

## CURRICULUM IN BUSINESS ADMINISTRATION

### For the Degree of Bachelor of Science in Business Administration

The Department of Business Administration offers six separate undergraduate concentrations: marketing, organizational administration, production, management science, industrial distribution management, and management information systems.

Marketing encompasses those business activities directly related to the process of placing meaningful assortments of goods and services in the hands of the consumer. The marketing student is concerned with the efficient performance of marketing activities and with their effective coordination with the other operations of the firm. Organizational administration is concerned primarily with the effective utilization of human resources within the business organization. Attention is focused on the organization as a social system and the forces that affect this system, such as the behavior of individuals and groups, economic conditions, and technology. Production and operations management is concerned primarily with the efficient utilization of the organization's material resources. Attention is focused on the design and improvement of productive capacity and the coordination of the productive process with other system activities. Management science is concerned with the use of models in management decision making. Attention is given to statistics, various optimization techniques, and other forms of mathematical modeling. The industrial distribution management concentration stresses the distribution and logistics function in the industrial sector of the economy with particular reference to the industrial distributor. Problems in the management of industrial distribution businesses, both as suppliers to and customers of manufacturers and other businesses, receive special attention. The concentration in management information systems permits students to acquire the skills necessary as systems analysts to analyze management's needs for information and identify efficient and effective methods to provide management

with such information. Such analysts have played an increasingly important role in business and government over the past twenty years.

Requirements for the degree are: B ADM 321—Individual Behavior in Organizations, or B ADM 322—Group Processes in the Organization, or B ADM 323—Organizational Design and Environment; B ADM 274—Operations Research; and one of the following concentrations:

### **MARKETING**

A student must take B ADM 320—Marketing Research, and B ADM 344—Buyer Behavior, plus one of the following courses:

B ADM 212—Principles of Retailing  
 ADV 383—Advertising Media Planning  
 B ADM 337—Promotion Management  
 B ADM 352—Pricing Policies  
 B ADM 360—Marketing to Business and Government  
 B ADM 370—International Marketing  
 B ADM 380—Advanced Marketing Management

### **ORGANIZATIONAL ADMINISTRATION**

A student must take four courses from the following list, three of which must be B ADM 321, 322, 323, or 351:

B ADM 321—Individual Behavior in Organizations  
 B ADM 322—Group Processes in the Organization  
 B ADM 323—Organizational Design and Environment  
 B ADM 351—Personnel Administration  
 LIR 345 —Economics of Human Resources  
 POL S 361—Introduction to Public Administration  
 POL S 362—Administrative Organization and Policy Development  
 PSYCH 355—Industrial Social Psychology  
 PSYCH 357—Psychology of Industrial Relations  
 SOC 318—Industry and Society  
 SOC 359—The Social Psychology of Organization

### **PRODUCTION**

A student must take B ADM 314—Production, and B ADM 315—Management in Manufacturing, plus one of the following courses:

ACCY 322—Managerial Accounting and Organizational Controls  
 B ADM 323—Organizational Design and Environment  
 B ADM 351—Personnel Administration  
 PSYCH 258—Human Factors in Human-Machine Systems  
 PSYCH 356—Human Performance and Engineering Psychology

### **MANAGEMENT SCIENCE**

A student may satisfy this option by taking any three courses approved in advance by the department head. Recommended sequences among the mathematics courses are either MATH 315 and 383, or MATH 361 or 363; and MATH 366. Selected courses include:

B ADM 373—Business Information Systems  
 B ADM 380—Advanced Marketing Management  
 ACCY 322—Managerial Accounting and Organizational Controls  
 MATH 315—Linear Transformations and Matrices  
 MATH 361—Introduction to Probability Theory I  
 MATH 363—Introduction to Mathematical Statistics and Probability I  
 MATH 364—Introduction to Mathematical Statistics and Probability II  
 MATH 366—Introduction to Probability Theory II  
 MATH 383—Linear Programming

### **INDUSTRIAL DISTRIBUTION MANAGEMENT**

A student must take the following courses:

B ADM 294—Practicum in Industrial Distribution Management<sup>1</sup> (taken during summer of junior year)  
 B ADM 295—Senior Seminar in Industrial Distribution  
 B ADM 314—Production  
 B ADM 315—Management in Manufacturing  
 B ADM 343—Purchasing and Materials Management  
 B ADM 360—Marketing to Business and Government  
 GE 103—Engineering Graphics and Design

PHYCS 140—Practical Physics: How Things Work—A Course for Nonscientists

In addition, students must take any two of the following courses:

ACCY 221—Cost Accounting<sup>2</sup>



B ADM 320—Marketing Research<sup>2</sup>  
 B ADM 345—Small Business Consulting  
 B ADM 346—Entrepreneurship: Small Business Formation<sup>2</sup>  
 B ADM 351—Personnel Administration  
 B ADM 352—Pricing Policies<sup>2</sup>  
 B ADM 391—Introduction to Management Information Systems  
 B ADM 392—Information Organization for Management Information Systems  
 B ADM 393—Management Information System Development  
 ECON 384—Economics of Transportation<sup>2</sup>  
 FIN 281—Short-Run Financial Management<sup>2</sup>  
 FIN 357—Financing Small Business  
 IE 335—Industrial Quality Control<sup>2</sup>  
 PSYCH 245—Industrial Organizational Psychology  
 SPCOM 211—Business and Professional Speaking  
 SPCOM 230—Interpersonal Communication

## MANAGEMENT INFORMATION SYSTEMS

A student must take the following four courses:

B ADM 391—Introduction to Management Information Systems  
 B ADM 392—Information Organization for Management Information Systems  
 B ADM 393—Management Information System Development  
 B ADM 394—Management Information and Control Systems  
 Substitutions may be approved by the head of the Department of Business Administration.

<sup>1</sup>Although only one summer practicum is required, it is recommended that students participate in two.

<sup>2</sup>Strongly recommended.

A student wishing to concentrate in production or management science is advised (not required) to fulfill the college mathematics requirement with MATH 120 and 132, or MATH 135.

Students must select PSYCH 100 and 201 from List 2.

B ADM 389 should be taken after all requirements in the concentration have been satisfied.

Courses used to fulfill major requirements may not be taken on a credit-no credit basis.

Beyond the required courses for the business core and major, no more than 12 of the 28 elective hours can be selected from business administration, accountancy, or finance.

## CURRICULUM IN ECONOMICS

### For the Degree of Bachelor of Science in Economics

Economics has been described as the study of how people use limited resources to produce various commodities and to distribute them to members of society for their consumption.

Accordingly, the economist is concerned with what is produced, how goods and services are distributed, the organization of industries, the labor supply and its use, international trade, the production and distribution of national income and wealth, government finance, and the use and conservation of land and natural resources.

The student majoring in economics establishes a core of knowledge by taking courses in intermediate theory and statistics. The student may then specialize by selecting course work in an area such as taxation and government finance, international economics, economic history, labor economics, economic development, urban and regional economics, quantitative economics, or government and economic activity.

An economics major is well prepared for a broad range of professional careers. Economics provides excellent training for further study in an M.B.A. or law program, or graduate work in an area such as economics, planning and administration, or policy studies. Career opportunities include management positions in business, industry, and government; teaching and administrative positions in colleges and universities; and research positions in private and public institutions.

Requirements for the degree include ECON 301, and 12 additional hours in economics at the 200 or 300 level, excluding ECON 294, 295, 299, and 300. Students with strong mathematics backgrounds or interest in further work in economics are advised (but not required) to fulfill the college mathematics requirement with MATH 120 and 132, or MATH 135, and to take additional training in courses such as MATH 242 or 245, and MATH 315.

CURRICULUM IN FINANCE

For the Degree of Bachelor of Science in Finance

The field of finance is primarily concerned with the acquisition and management of funds by business firms, governments, and individuals. A new business, for example, must secure sufficient funds to initiate and maintain operations until the cash flow from sales is great enough to maintain capital requirements. An established business seeks financial advice when considering the purchase of new equipment, the selection of a new plant location, or the expansion of present facilities. Business policy decisions that result in changes in the capital structure of the business are of special importance to finance.

A student who majors in finance may specialize in finance, investment, and financial institutions and markets;; insurance and risk management; or real estate and urban economics.

As the study of finance is designed to provide the student with both the theoretical background and the analytical tools required to make effective judgments in finance, many students select careers in business financial management, commercial and investment banking, government finance, insurance, and real estate.

One of the following concentrations is required for the degree:

BUSINESS FINANCE, INVESTMENTS, AND FINANCIAL INSTITUTIONS AND MARKETS

Four of: FIN 235, 237, 238, 252, 258, 280, 281, 354, 357

One of: ACCY 211, 221; B ADM 274, 320, 337; any ECON course numbered 200 or higher, excluding ECON 300.

INSURANCE AND RISK MANAGEMENT

FIN 260

Four of: Fin 262, 360, 363, 370, 371

One of: ACCY 251; ECON 301, or appropriate 300-level economics course; FIN 294, 295; MATH 371, 372

REAL ESTATE AND URBAN ECONOMICS

FIN 264<sup>1</sup>

Four of: FIN 365-369

One of: ACCY 251; AG EC 312; ARCH 379; CE 318; ECON 360; FIN 371; GEOG 366, 383

<sup>1</sup>FIN 264 will satisfy the education requirements for the salesperson's license examination. Any two of the following courses will satisfy the additional education requirements for the broker's license examination (for students who have had an active salesperson's license for one year): FIN 365, 366, 367, 368, 369, AG EC 312.

TEACHER EDUCATION MINOR IN ACCOUNTANCY FOR NONCOMMERCE MAJORS

REQUIRED COURSES	HOURS
ACCY 201—Principles of Accounting I .....	3
ACCY 202—Principles of Accounting II .....	3
ACCY 211—Intermediate Accounting I .....	3
CS 105 or 106 (computer science) .....	3
VOTEC 271—Technique and Curriculum Development for Teaching Data Processing and Office Machines .....	3
Electives in accounting, business administration or computer science <sup>1</sup> .....	9
Total .....	24

<sup>1</sup>All electives must be approved by an adviser in the Division of Business Education.

TEACHER EDUCATION MINOR IN ECONOMICS

For a minor in economics, a student must complete ECON 101, 300, and 301; ECON 171, or ECON 172 and 173, or equivalent work in statistics; and an additional 12 hours in economics with at least one course in each of the following areas for a total of 24 hours:

Policy and labor: ECON 214, 240, 288, 303, 314, 315, 341, 343, 345, 384, 386, 388, 389

International and development: ECON 228, 328, 329, 350, 351-356

History and comparative systems: ECON 236-238, 255, 357-359



# College of Communications

119 Gregory Hall, 810 South Wright Street, Urbana, IL 61801

Departments and Curricula ..... 151

Admission Requirements ..... 152

Honors Programs ..... 152

Graduation Requirements ..... 153

University General Education Requirements ..... 154

Curricula ..... 154

For students with two years of college and a commitment to a career in communications, the College of Communications offers an additional two years of education leading to Bachelor of Science degrees in advertising, in journalism, and in media studies.

Through its educational programs, the college aims at giving students in advertising and journalism professional competence in their chosen fields of communications. At the same time, it seeks to help them acquire a solid background in the social sciences and humanities. Its premise is that students need an understanding of people and the world they live in if they are to communicate effectively through print and broadcast media.

Through its media studies program, the college offers students the opportunity to study, analyze, and critique modern communications media, again with a firm foundation in the social sciences and humanities.

The college has modern equipment and facilities for teaching future communications workers—newsrooms, a photographic darkroom, a typography laboratory, an advertising layout laboratory, an audio laboratory, and a video laboratory. Students also use the facilities of the community CATV studio for laboratory instruction. The Communications Library is generally recognized as one of the best in the nation. The departments of advertising and journalism maintain job placement services for their students.

The college is also the supervising administrative unit for the University Broadcasting Division and the Institute of Communications Research.

Instruction in journalism at the University was begun in 1902 as part of the course offering in rhetoric and was organized as a division of the Department of English in 1916. The School of Journalism was established in 1927 as a separate unit. In 1950, it became the School of Journalism and Communications with divisions of journalism, advertising, and radio, the last of which later added instruction in television. In 1957, the school was elevated to college status. Two years later, the college’s three divisions were redesignated as departments. The present name—College of Communications—was adopted in 1968.

## DEPARTMENTS AND CURRICULA

Through its two academic departments, the college, which has been accredited by the American Council on Education for Journalism and Mass Communication, offers professional education in three sequences—advertising, news-editorial, and broadcast journalism. A nonprofessional program in media studies is also offered.

The Department of Advertising supervises work in the advertising curriculum for students expecting to enter advertising agencies or the advertising departments of communications media, industrial organizations, or retail stores. The department aims to educate students to become analytical, flexible, and creative professionals who are able to deal with current and future advertising problems.

The Department of Journalism seeks to prepare students for varied and long-term careers in print and electronic journalism. The primary professional aim of the news-editorial sequence is to train students as public affairs reporters by providing them with the skills, knowledge, and understanding required for success as journalists. The broadcast journalism sequence aims to prepare broadly educated professionals who will eventually assume decision-making and leadership roles.

The media studies curriculum is supervised by the dean of the college. It is designed to give students concentrated formal academic study in the development of the communications media and their underlying technologies.

The Departments of Advertising and Journalism offer graduate programs leading to Master of Science degrees in advertising and in journalism. The college offers an interdisciplinary program leading to the Doctor of Philosophy in communications under the direction of the Institute of Communications Research.

## **ADMISSION REQUIREMENTS**

For admission to the College of Communications, a student must complete 60 semester hours of acceptable undergraduate college work and present a grade-point average of at least 4.0 (A = 5.0) and evidence of interest in a professional career in communications. The competitive grade-point average in recent years has been higher. Applicants with less than a 4.0 grade-point average may be considered if they demonstrate strong career motivation and aptitude, provided that spaces are available.

Since they must have junior standing to be eligible to enter the College of Communications, students at the University of Illinois at Urbana-Champaign are advised to register as freshmen and sophomores in the prejournalism curriculum of the College of Liberal Arts and Sciences and to follow a broad general education program. Students at other institutions should follow similar programs.

Although there is no formal preadvertising or prejournalism program, a strongly recommended program for each college curriculum for the first two years is available in the college office. These programs include basic courses in economics, English, history, philosophy, sociology, and anthropology, as well as courses satisfying the University's general education requirements. Students who do not have a reasonable degree of typing ability must acquire this skill before entering the college, as it is required in all curricula. A basic course in computer science also would be useful.

Students at the University of Illinois at Urbana-Champaign should make arrangements at the college office to apply for transfer into the college before the advance enrollment period in the semester in which they will earn junior standing. Junior standing is necessary for students to take most courses offered by the College of Communications.

Students completing their freshman and sophomore studies at institutions other than the University of Illinois are strongly advised to defer courses in advertising, journalism, and communications until enrolled in the College of Communications. Students must take all of their required communications courses in the College of Communications. They may be permitted to transfer up to 9 hours of elective communications courses taken elsewhere, provided that they take an equivalent number of additional hours in advanced social studies, arts, and sciences beyond the 20 semester hours required for graduation from the college.

The college does not recommend that students with more than 90 hours enter any of its undergraduate programs. The programs are set up on a four-semester basis. In certain cases, it is possible to complete the curriculum requirements in three semesters if prerequisites in sequential courses can be met. The college does not accept a student who has already received a bachelor's degree as a candidate for a second bachelor's degree. Instead, it recommends that such a student enter one of its graduate programs.

## **HONORS PROGRAMS**

### **Edmund J. James Scholars**

The College of Communications does not have a college honors program. However, a student who transfers into the College of Communications from another college on the Urbana-Champaign campus and is a James Scholar in the previous college at the time of transfer will continue to be listed as a James Scholar in the College of Communications through the end of the first spring semester in the college. If the student has a cumulative grade-point average of 4.5 (A = 5.0) at that time, he or she will be certified as a James Scholar for the academic year and continued as a James Scholar through the next academic year when his or her records will be reviewed for certification. Any student whose cumulative average falls below 4.5 will not be certified and will be removed from the James Scholars listing. Designation as a James Scholar is available only to a student who was previously so designated.



## Dean's List

To be eligible for Dean's List recognition for any semester, students must rank in the top 20 percent of their respective classes and must successfully complete 14 academic hours, of which at least 12 hours must be traditionally graded hours (excluding course work graded pass-fail, credit-no credit, satisfactory-unsatisfactory, excused, or deferred) and excluding grades and hours in basic physical education courses and religious foundation courses.

## Honors at Graduation

For graduation with honors, a student must have been named to the Dean's List of the College of Communications for at least three semesters, must rank in the upper 20 percent of the student's graduation class, and must have earned a minimum grade-point average of 4.5 in all courses taken after admission to the College of Communications. For graduation with high honors, a student must have been named to the Dean's List of the College of Communications for at least three semesters, must rank in the upper 10 percent of the student's graduation class, and must have earned a minimum grade-point average of 4.7 in all courses taken after admission to the College of Communications. For graduation with highest honors, a student must have been named to the Dean's List of the College of Communications for at least three semesters, must rank in the upper 5 percent of the student's graduation class, and must have earned a minimum grade-point average of 4.8 in all courses taken after admission to the College of Communications.

## Kappa Tau Alpha

Each year, scholastically high-ranking undergraduate and graduate students in the College of Communications are considered for membership in Kappa Tau Alpha, national honorary society in journalism and communications. The society was founded to recognize and promote scholarship in advertising, journalism, and broadcasting.

## GRADUATION REQUIREMENTS

The college offers programs of study leading to Bachelor of Science degrees in advertising, journalism, and in media studies. To meet the degree requirements, all students must satisfy general University requirements as to registration, residence, scholarship, and fees. They must complete the rhetoric requirements and approved sequences in the humanities, social sciences, and natural sciences as listed under University General Education Requirements on page 154. All students must also fulfill the following general requirements of the College of Communications:

- Complete a total of 124 semester hours of course credit. Basic physical education activity courses and basic courses in military, naval, or air force science may not be counted toward this total although such credits may be counted toward meeting the admission requirement of 60 semester hours. No more than a total of 12 hours earned in undergraduate open seminars (199 courses), in independent study courses outside the college, and in other experimental courses may be counted toward the degrees offered by the college. A student in the college may enroll in one such course for a maximum of 4 hours of credit in any semester with the consent of the head of the student's major department. The same policy is applied to credit for internships in fields other than communications with the additional requirement that such courses must also be approved by the dean of the college. While the college encourages its students to hold internships in the communications field, particularly in the summer between the junior and senior years, it does not allow academic credit toward the degree for such experience alone. Credit granted by other institutions for internships is not accepted.
- Complete not less than 30 hours but not more than 36 hours in courses offered by the college in advertising, communications, and journalism. Those undergraduate courses cross-listed with advertising or journalism courses are considered college course offerings. Undergraduate communications courses cross-listed only with departments outside the college are not counted as college offerings, except COMM 322.
- Complete not less than 20 hours in advanced (200- and 300-level) courses at the University of Illinois at Urbana-Champaign in the social studies, arts, and sciences approved by the faculty. The human resources and family studies minor may be substituted for the requirement of 20 hours in advanced social studies, arts, and sciences by advertising and journalism majors.

- Complete the specific requirements of one of the curricula offered by the college, as listed below.
- Earn a grade-point average of 3.0 (A = 5.0) in all courses presented for the degree. In addition, students must earn a 3.0 cumulative grade-point average for all courses taken while registered in the college.

## UNIVERSITY GENERAL EDUCATION REQUIREMENTS

To be graduated from the College of Communications, students must satisfy the University's general education requirements, which include completion of the rhetoric requirement and a minimum of 6 hours each in the humanities, social sciences, and natural sciences. The sequences and courses below have been approved by the college. A student may not use sequences from any one department to satisfy the requirement in more than one of these areas.

Any substitution of sequences or courses must be approved by the dean of the college. However, any sequence or combination of courses approved to fulfill these requirements by another college at the Urbana-Champaign campus may be accepted by the College of Communications with the exceptions stated below.

The college will waive the requirements in any of the following three areas if the student's performance in the College-Level Examination Program (CLEP) earned such a waiver in the student's previous college at UIUC. However, only CLEP hours earned in the social sciences and humanities, up to a maximum of 12 hours, will be allowed toward the graduation requirement of 124 hours. CLEP credit hours earned in the natural sciences (including mathematics) and rhetoric will not be allowed.

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

### Humanities

Any of the following sequences or combinations from the same department:

ARTHI 101, 110, 111, 112, 115, 116; CLCIV 120, 131, 132; C LIT 141, 142; ENGL 101, 102, 103, 104, 106, 113, 115, 116, 118, 119, 120, 198; HIST 131, 132, 181, 182; HUMAN 141, 142; MUSIC 130, 131, 132, 133, 134, 135; PHIL 101, 102, 105, 106, 107, 110.

### Social Sciences

Any of the following sequences, or combinations from the same department:

ANTH 102, 103; ECON 101, 236, 240, 245, 255; GEOG 101, 104, 105; HIST 111, 112, 151, 152; POL S 100, 150; PSYCH 100 or 105, 201, 216, 238, 245, 250; SOC 100, 131.

### Natural Sciences

To satisfy this requirement, students must select at least 6 hours of courses from either the life sciences, physical sciences, or mathematics. Combinations of life science courses with physical science or mathematics are not accepted. Any of the following sequences in the life sciences:

BIOL 100 or 101, and 102 or 103, or a combination of six hours from the following list: ANTH 143; BIOL 100 or 101, 106, 107 or 108; PLBIO 100, 102; EEE 105; ENTOM 118; MCBIO 113; PHYSL 103; PSYCH 103, 210, 217, 230;

Or any of the following sequences in the physical sciences:

ASTR 101 and 102, 140 and 100; GEOG 102, 103; GEOL 101 and 102; or any 6 hours of chemistry, except CHEM 100; or 6 hours of physics;

Or any 6 hours in mathematics, exclusive of MATH 101, 104, 111, 112, 114, 116, and 161.

Statistics courses and computer science courses may not be used to satisfy the natural science requirement. It is recommended that students in the advertising curriculum use mathematics to satisfy the natural science requirement; those in the journalism and media studies curricula use either life or physical sciences to satisfy this requirement.

## Curricula

### CURRICULUM IN ADVERTISING

#### For the Degree of Bachelor of Science in Advertising

To be graduated from the advertising curriculum, a student must meet the general University and college requirements for the degree listed on pages 153 and 154 and must complete the following courses:



	HOURS
ADV 281—Introduction to Advertising .....	3
ADV 381—Advertising Research Methods .....	3
ADV 382—Advertising Creative Strategy and Tactics .....	3
ADV 383—Advertising Media Strategy and Tactics .....	3
ADV 391—Advertising Management: Planning .....	3
ADV 392—Advertising Management: Strategy and Tactics .....	3
ADV 393—Advertising in Contemporary Society .....	3
JOURN 217—History of Communications; JOURN 218—Communications and Public Opinion; JOURN 220—Communications and Popular Culture; JOURN 231—Mass Communications in a Democratic Society; JOURN 241—Law and Communications; or JOURN 251—Social Aspects of Mass Communications (a minimum of two courses from this list) .....	6
Advertising, journalism, or communications electives (no more than 9) .....	3
Total .....	30
A specified course or courses in statistical methods <sup>1</sup> .....	3-6
ECON 101—Introduction to Economics .....	4
B ADM 202—Principles of Marketing <sup>2</sup> .....	3
PSYCH 100—Introduction to Psychology; SOC 100—Introduction to Sociology; or ANTH 103—Introduction to Cultural Anthropology (any two of these three courses) .....	7-8
MATH 112—College Algebra—or equivalent .....	3

<sup>1</sup>Currently acceptable courses: EDPSY 390<sup>2</sup>; ECON 171; ECON 172 & 173; PSYCH 235<sup>2</sup>; and STATS 100.  
<sup>2</sup>These courses may be credited toward the college requirement of 20 hours of advanced social studies, arts, and sciences.

## CURRICULUM IN JOURNALISM

### For the Degree of Bachelor of Science in Journalism

#### News-Editorial Sequence

To be graduated from the news-editorial sequence of the Department of Journalism, a student must meet the general University and college requirements for the degree listed on pages 153 and 154 and must complete the following courses:

	HOURS
JOURN 350—Reporting I .....	4
JOURN 360—Graphic Arts .....	4
JOURN 370—News Editing .....	4
JOURN 380—Reporting II .....	4
JOURN 241—Law and Communications .....	3
JOURN 217—History of Communications; JOURN 218—Communications and Public Opinion; JOURN 220—Communications and Popular Culture; JOURN 231—Mass Communications in a Democratic Society; or JOURN 251—Social Aspects of Mass Communications (a minimum of one course from this list) <sup>1</sup> .....	3
Advertising, journalism or communications electives (no more than 14) .....	8
Total .....	30
At least 6 hours of credit in each of the following areas: economics, English or American literature, history, philosophy, political science, and sociology or anthropology <sup>1</sup> .....	36

<sup>1</sup>Courses taken in these fields to fulfill the college requirement of 20 hours of advanced social studies, arts, and sciences may be used toward fulfilling the departmental requirements, as may lower-division courses or sequences in these fields taken any time during the student's four years. Undergraduate seminar courses (199) and hours earned through CLEP may not be used to fulfill these departmental requirements.

#### Broadcast Journalism Sequence

To be graduated from the broadcast journalism sequence of the Department of Journalism, a student must meet the general University and college requirements for a degree listed on pages 153 and 154 and must complete the following courses:

JOURN 350—Reporting I .....	4	
JOURN 362—Broadcast News Production .....	4	
JOURN 372—Broadcast News Writing and Gathering .....	4	
JOURN 382—Broadcast News Editing .....	4	
JOURN 241—Law and Communications .....	3	
JOURN 217—History of Communications; JOURN 218—Communications and Public Opinion; JOURN 220—Communications and Popular Culture; JOURN 231—Mass Communications in a Democratic Society; JOURN 251—Social Aspects of Mass Communications (a minimum of one course from this list) .....	3	
Advertising, journalism, or communications electives (no more than 14) .....	8	
Total .....	30	
At least 6 hours of credit in each of six of the following areas: economics, English or American literature, history, natural science, philosophy, political science, and sociology or anthropology <sup>1</sup> .....		36
At least four courses in each of two department-approved areas of specialization <sup>1</sup> .....		

<sup>1</sup>Courses taken in these areas to fulfill the college requirement of 20 hours of advanced social studies, arts, and sciences may be used toward fulfilling these departmental requirements, as may lower-division courses or sequences in these areas taken any time during the student's four years. Natural science may be either life science or physical science, but not mathematics, to satisfy this departmental requirement. Besides the above seven areas, specializations may include other areas, such as agricultural economics, labor relations, urban planning, finance, and speech communication. Undergraduate seminar courses (199), independent study courses, and hours earned through CLEP may not be used to fulfill any of these departmental requirements.

## CURRICULUM IN MEDIA STUDIES

### For the Degree of Bachelor of Science in Media Studies

To be graduated from the media studies curriculum, a student must meet the general University and college requirements for the degree listed on page 153 and must complete the following courses:

	HOURS
COMM 101—Social and Cultural Foundations of Mass Media <sup>1</sup> .....	(3)
COMM 217—History of Communications .....	3
COMM 220—Communications and Popular Culture .....	3
COMM 231—Mass Communications in a Democratic Society .....	3
COMM 251—Social Aspects of Mass Communications .....	3
COMM 264—Economic Structure of Communications .....	3
COMM 310—Media Ethics .....	3
COMM 362—Telecommunications Management .....	3
College of Communications electives from list below .....	12
At least four elective courses totaling at least 12 hours up to a maximum of six courses totaling no more than 18 hours must be chosen from the following list: ADV 281—Introduction to Advertising; COMM 218—Communications and Public Opinion; COMM 241—Law and Communications; COMM 261—American Broadcasting and Telecommunications; COMM 310—Media Ethics; COMM 322—Politics and the Media; COMM 362—Telecommunications Management; COMM 366—Film as Business; JOURN 223—Photojournalism; JOURN 350—Reporting I; COMM 361—Telecommunications Programming; COMM 362—Telecommunications Management; COMM 368—Legal and Policy Issues in Telecommunications.	
Total .....	30
CS 106—Introduction to Computers for the Nontechnical Major .....	3
At least 20 hours of advanced (200- and 300-level) credits in one or two areas outside of the College of Communications, such as economics, management, political science, sociology, psychology, literature, philosophy, physics, or engineering <sup>2</sup> .....	
	20

<sup>1</sup>Required but hours do not count toward the 30 hours for the major.

<sup>2</sup>Fulfills the college requirement of 20 hours of advanced level social studies, arts, and sciences.



MINORS

A student in the College of Communications is not required to complete a minor. A student in advertising or journalism with a special interest in human resources and family studies may elect to follow a special minor of at least 20 hours as listed below. The minor may be substituted for the college requirement of 20 hours of advanced social studies, arts, and sciences.

For students not enrolled in the College of Communications, the college offers only one approved special minor, a minor in the teaching of journalism for students in teacher education. Other students are cautioned against attempting to follow a minor or cognate in communications even if approved by their major departments. Enrollment in many courses offered by the college is restricted to majors in one of the college’s curricula. In all college courses, enrollment priority is given to students enrolled in the College of Communications.

Minor in Human Resources and Family Studies

For a minor in human resources and family studies (home economics), the student must complete a minimum of 20 hours in courses offered by the School of Human Resources and Family Studies. The 20 hours completed in this area may be substituted for the 20 hours of advanced social studies, arts, and sciences required by the college for graduation. However, all students in the news-editorial and broadcast journalism sequences must satisfy the departmental requirements of at least 6 hours each in history, political science, philosophy, economics, sociology or anthropology, and English or American literature. These courses may be taken at the lower- or upper-division level.

It is recommended that students select a concentration of courses from one of five areas of human resources and family studies (family and consumer economics, foods and nutrition, human development and family ecology, interior design, or textiles and apparel) and select electives in other areas to total 20 hours.

TEACHER EDUCATION MINOR IN JOURNALISM

This minor is specifically for students in teacher education programs. It requires a minimum of 18 hours in communications courses. In addition to three required courses with a total of 11 hours of credit, a minimum of 7 additional hours must be chosen from a selected group of electives. Students are also required to take at least 7 hours of rhetoric, for a total of 25 hours.

REQUIRED COURSES	HOURS
Typography or graphic arts .....	3-4
Newswriting .....	4
News editing .....	4
Electives in advertising, journalism, and communications .....	6 or 7
RHET 105 or 108 .....	4
One of the following: ENGL 381, RHET 133, or RHET 143 .....	3
Total .....	25

ELECTIVES	
Introduction to advertising .....	3
Advanced reporting .....	4
Photojournalism .....	3
Magazine article writing .....	3
American broadcasting and telecommunications .....	3
Others may be chosen in consultation with the adviser.	

# College of Education

120 Education Building, 1310 South Sixth Street, Champaign, IL 61820

Admission Requirements ..... 159

Special Programs ..... 159

Honors Programs ..... 159

Graduation Requirements ..... 160

General Education Requirements ..... 160

Curricula ..... 160

The College of Education at the University of Illinois at Urbana-Champaign offers undergraduate degree programs in three of the six departments within the college. The departments that offer undergraduate degree programs, and the programs offered by each, are described below.

The Department of Curriculum and Instruction offers degree programs in elementary education, early childhood education, and secondary education. Students who satisfactorily complete the degree program in elementary education are eligible for the University's recommendation for certification in grades kindergarten through nine. The early childhood education degree program prepares students for recommendation for early childhood certification (birth through grade three). The secondary education program offers degrees in the following teaching specialties: English, mathematics, social studies, general science, physical sciences, and lifesciences. Students who satisfactorily complete a degree program in secondary education are eligible for the University's recommendation for certification in grades six through twelve. Only students who have earned at least 60 semester hours are considered for admission to secondary education curricula in the College of Education.

The Department of Special Education offers an undergraduate degree program preparatory to the teaching of persons with moderate to severe disabilities. Students who satisfactorily complete the degree program in special education are eligible for the University's recommendation for certification in grades kindergarten through twelve with an endorsement in trainable mentally handicapped. This program is able to accommodate only a small number of juniors and seniors. Applicants to this program must complete special admission procedures.

The Department of Vocational and Technical Education offers degree programs in occupational/practical arts education and business education. Students who satisfactorily complete the degree program in occupational/practical arts or business education are eligible for the University's recommendation for certification in grades six through twelve. Students interested in occupational/practical arts education are encouraged to contact the program adviser because this curriculum is currently under revision. The department also has a program for the training of teachers in nonschool settings. Students who elect this option are not eligible for the University's recommendation for certification.

In addition to these degree programs, a two-year curriculum in the College of Education, called education general, is available to students who have completed less than 60 semester hours of credit. It is designed to accommodate students who are uncertain about the specific degree programs they wish to pursue in the College of Education and students who have not completed the 60 hours required to qualify for admission to curricula in the college for which junior standing is an admission requirement.

In addition to offering undergraduate degree programs in education, the College of Education, under the auspices of the Council on Teacher Education, cooperates with four other colleges on the Urbana-Champaign campus to provide courses in professional education to undergraduate students who are preparing for careers in teaching and special educational services.

The College of Education also offers graduate degree programs. Detailed information concerning graduate programs in education may be obtained by referring to the College of Education *Graduate Programs Handbook* available in 120 Education Building.



## ADMISSION REQUIREMENTS

The curricula in education general, early childhood education, and elementary education admit beginning freshmen. Junior standing, at least 60 semester hours of baccalaureate-oriented course work attained at an accredited institution of higher learning, is required for admission to the programs in business education, special education, occupational/practical arts education, and secondary education.

A minimum cumulative grade-point average of 3.5 (A = 5.0) is required to be considered for admission to the College of Education in good standing. Admission is competitive, with some departments requiring higher grade-point averages for admission. A student whose cumulative average is below 3.5 may be considered individually, on a petition basis, if enrollment vacancies exist in the curriculum to which admission is being sought. Students admitted with less than a 3.5 average will be placed on academic probation as a condition of admission.

## SPECIAL PROGRAMS

### Elementary Education Semester in England

The elementary and early childhood education program provides an opportunity for juniors and seniors to study at Bath College of Higher Education and to work in the British schools. Students carry several courses and have the opportunity to complete a five-week teaching practice. The one semester of work and study enables students preparing for teaching to receive firsthand experience working with children and to work with teaching methods and curricula used in England. Costs for the semester of study and transportation expenses are borne by the students involved, and normally somewhat exceed the average costs of attending a semester at the University of Illinois at Urbana-Champaign.

Inquiries regarding the program should be directed to the Instructional Programs Office, 120 Education Building, 1310 South Sixth Street, Champaign, IL 61820.

## HONORS PROGRAMS

### Honors at Graduation

Eligibility for graduation with honors is established on the fulfillment of residence and scholastic requirements. Residence requirements for graduation with honors are fulfilled under any of the following conditions:

- Meeting University residence requirements for graduation and having earned at least 54 of the final 60 semester hours of credit in residence at the Urbana-Champaign campus. Course credit that is not included in the grade-point average does not count toward the residence requirement.
- Obtaining waiver of University residence requirements by petition to the Instructional Programs Office, 120 Education Building, and having earned at least 54 of the last 60 semester hours of credit, excluding credit for courses that are not included in computation of the grade-point average, through resident study at the Urbana-Champaign campus.
- Meeting University residence requirements and having completed all but 15 hours in resident study at the Urbana-Champaign campus.
- Having completed the first 90 semester hours in residence and all or part of the senior year in an approved program at another institution for a University of Illinois degree.

A student who achieves the required scholastic average in all education courses and in all work presented for graduation (excluding credit for courses not included in the computation of the grade-point average), with professional education and cumulative averages computed separately, may be recommended for honors as follows: honors, minimum professional education and cumulative grade-point averages of 4.5 (A = 5.0); high honors, minimum professional education and cumulative grade-point averages of 4.75; highest honors, minimum professional education and cumulative grade-point averages of 4.75 and rank within the top 5 percent of those education students graduating within the same period.

### Edmund J. James Scholars

For more information concerning the James Scholar program, see page 37.

GRADUATION REQUIREMENTS

Each undergraduate student in the College of Education must meet the University requirements (pages 72 to 79) and the requirements of the Council on Teacher Education (pages 87 to 92) for graduation. Students in all curricula must meet the course and academic credit requirements of their curricula with satisfactory scholastic averages. Educational practice (student teaching), which is required of all undergraduates in teacher education, must be completed at the University of Illinois at Urbana-Champaign.

Students in need of additional information concerning regulations and requirements of the College of Education should consult their academic advisers or the assistant dean in the Instructional Programs Office, College of Education, University of Illinois at Urbana-Champaign, 120 Education Building, 1310 South Sixth Street, Champaign, IL 61820.

For additional requirements pertaining to certification, please refer to the section on the Council on Teacher Education, pages 87 to 92.

GENERAL EDUCATION REQUIREMENTS

At the time of publication, the University general education requirements were under revision. Prospective and new students should confirm their general education requirements by consulting the college admissions/records officer.

In order to meet the University's current requirements in general education, each candidate for a degree from the College of Education must complete at least 6 semester hours of credit in each of three areas: humanities, sciences, and social sciences. In all teacher education curricula, additional credit in these areas is required. These requirements are generally fulfilled by course work offered by the College of Liberal Arts and Sciences. Students in the special or secondary education curricula must select their courses for general education from the Council on Teacher Education list of approved courses, which is available from academic advisers and the Instructional Programs Office.

Curricula

EDUCATION GENERAL

Education general is a two-year curriculum available to students in the College of Education who have completed less than 60 semester hours of credit. It has been designed to accommodate students who are uncertain about the specific degree programs they wish to enter in the College of Education and students who have not completed the 60 hours required to qualify for admission to curricula in the college for which junior standing is an admission requirement, e.g., secondary education or special education. Students in education general are required to pursue a program of study that includes the course requirements common to all undergraduate programs in the College of Education and the requirements for continuation established by the University and the College of Education. In order to obtain a bachelor's degree, a student must transfer out of education general prior to or during the term in which the student will complete his or her 60th semester hour.

Recommended Program

FIRST SEMESTER		HOURS	SECOND SEMESTER		HOURS
RHET 105 OR 108, OR SPCOM 111 .....		3-4	Speech performance course or SPCOM 112 .....		3
PSYCH 100 .....		4	Health and physical development .....		2-3
Science elective .....		3	Science elective .....		3
HIST 151 or 152 .....		4	POL S 150 .....		3
Total .....		14-15	Mathematics .....		3-4
			Total .....		14-16
THIRD SEMESTER		HOURS	FOURTH SEMESTER		HOURS
Humanities elective .....		3	Humanities elective .....		3
E P S 201 .....		3	EDPSY 236 or 211 .....		3
English or American literature .....		3	Science elective .....		3-4
Course work in major or minor .....		6	Course work in major or minor .....		6
Total .....		15	Total .....		15-16



CURRICULUM PREPARATORY TO HIGH SCHOOL TEACHING

For the Degree of Bachelor of Science in Secondary Education

The following requirements in general education are common to all secondary education specialties. For requirements in addition to those below, refer to pages 87 to 92 for teacher education requirements applicable to all curricula.

It is essential that students consult appropriate teacher education advisers in the selection of specific courses and in the overall planning of degree programs.

A minimum of 120 hours of credit, excluding basic military science, is required for graduation.

GENERAL EDUCATION REQUIREMENTS<sup>1</sup>

All courses must appear on the Council on Teacher Education list of approved courses for general education. Courses within the teaching major or minor may be used to satisfy general education requirements provided that they appear on the council list of approved courses.

COMMUNICATION SKILLS	HOURS
RHET105 or 108 and SPCOM 101 or a speech performance elective, and one writing intensive course from UIUC with credit showing on the transcript as "WRITE 200—1 hour" .....	8
or	
RHET 105 or 108 and SPCOM 101 or a speech performance elective, and an additional rhetoric or writing course (equal to or greater than 2 hours), such as RHET 133 or 143 .....	10
or	
SPCOM 111 and 112 and an additional rhetoric or writing course (equal to or greater than 3 hours), such as RHET 133 or 143 .....	9
Total .....	8-10

MATHEMATICS AND SCIENCE <sup>2</sup>	HOURS
Mathematics .....	3
Biological science .....	3-4
Physical science .....	3-4
Biological or physical science .....	3-4
Total .....	12-15

HUMANITIES	HOURS
American history <sup>3</sup> .....	3-4
English or American literature .....	3
Electives <sup>4</sup> .....	9
Total .....	15-16

SOCIAL SCIENCES	HOURS
American Government (POL S 150) .....	3
Introduction to Psychology (PSYCH 100 or equivalent) .....	4
Electives <sup>4</sup> .....	3
Total .....	10

HEALTH AND/OR PHYSICAL DEVELOPMENT	HOURS
Health and/or physical development .....	2

<sup>1</sup>Pending final approval.  
<sup>2</sup>At least one science course must be a laboratory course.  
<sup>3</sup>American history may be taken in either humanities or social sciences provided that the student completes a minimum of 15 semester hours of humanities and 9 semester hours of social sciences.  
<sup>4</sup>At least one 3-semester-hour course in non-Western cultures must be taken in either humanities or social sciences.

Specialty in English

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3

Foundations of American Education (E P S 201) .....	3
Teaching of Reading in Grades Four through Twelve (C&I 372) .....	3
Techniques of Teaching in the Secondary Schools (C&I 241) .....	4
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Total .....	29-32

REQUIREMENTS FOR BOTH OPTIONS	HOURS
Literature for the High School or Library Materials for Young Adults (ENGL 385 or LIS 304) .....	3
Oral Interpretation (SPCOM 141) .....	3

OPTION A: TEACHER EDUCATION MAJOR IN ENGLISH	HOURS
Introduction to Shakespeare (ENGL 118, 318, or 319) .....	3
Survey of American literature, or equivalent (ENGL 255 and 256) .....	6
Survey of English literature, or equivalent (ENGL 209 and 210) .....	6
Descriptive English Grammar (ENGL 302) .....	3
Theory and Practice of Written Composition (ENGL 381) .....	3
English electives .....	11
Six of these hours must be in courses restricted to advanced undergraduates. It is recommended that electives be chosen from English offerings in literary genres, world and/or classical literature, literary criticism, contemporary literature, backgrounds to literature, rhetoric, and linguistics.	
Total .....	32

**TEACHER EDUCATION MINOR OR SUPPORTING AREAS OF CONCENTRATION**

Students selecting the teacher education major in English (Option A) must (1) complete one of the teacher education minors (with the exception of rhetoric) listed on page 88, (2) complete at least three courses in each of two areas of concentration, or (3) complete at least two courses in each of three areas of concentration. The areas of concentration are language and communications; language performance, oral and written; humanities and philosophy; methods and theories of critical processes; world and classical literatures; and the teaching of components of English. Courses for the areas of concentration must be selected in consultation with the adviser. Students selecting the teacher education major in literature (Option B) must complete the approved teacher education minor in rhetoric or the approved teacher education minor in the teaching of English as a second language.

**TOTAL**, including general education and professional education credits, at least ..... 120

OPTION B: TEACHER EDUCATION MAJOR IN LITERATURE	
Poetry, drama, fiction, or honors seminar (ENGL 101, 102, 103, and/or 198) .....	6-8
Introduction to Shakespeare (ENGL 118, 318, or 319) .....	3-6
Practical Criticism (ENGL 215) .....	3
Survey of American literature (ENGL 255 and 256) .....	6
Survey of English literature (ENGL 209 and 210) .....	6
Advanced English electives .....	5-8
Total .....	29-37

**TEACHER EDUCATION MINOR IN RHETORIC**

See pages 88 and 318.

**TEACHER EDUCATION MINOR IN ENGLISH AS A SECOND LANGUAGE**

See pages 88 and 318.

**TOTAL**, including general education and professional education credits, at least ..... 120

**Specialty in General Science**

In order to be in good academic standing and to remain in the program, a student must satisfy the following requirements (in addition to those requirements applicable to all teacher education curricula): (1) a student must have at least 3.5 (A = 5.0) University of Illinois and cumulative grade-point averages and (2) a student must also have at least 3.0 University of Illinois and cumulative grade-point averages in all attempts at science and mathematics courses taken at the University and elsewhere.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3



Foundations of American Education (E P S 201)	3
Microteaching: Practice in Teaching Techniques (C&I 239)	2
Techniques of Teaching in the Secondary Schools (C&I 241)	4-5
Educational Practice in Secondary Education (ED PR 242)	5-8
Exceptional Students in Secondary Schools (SP ED 218)	1
Total	26-30

REQUIRED CORE COURSES

General Physics (PHYCS 101 and 102, or 106, 107, and 108)	10-12
General chemistry (CHEM 101 and 102, or 107, 108, 109, and 110)	8-10
Life science (BIOL 110 and 111)	10
Descriptive statistics or educational measurement	3-4
Two of the following:	
Descriptive Astronomy or General Astronomy (ASTR 101 and 102, or 210)	3-8
Physical geography	4
Physical geology	4

ELECTIVES

Additional electives in science and courses related to science teaching must be chosen in consultation with an adviser and must be taken to bring the total of such work to approximately 70 semester hours, including 15 semester hours of 200- and/or 300-level courses in science, exclusive of those listed immediately above. The completion of a teacher education minor in either biology or mathematics is recommended.<sup>1</sup>

**TOTAL**, including general education and professional education credits, at least 120

<sup>1</sup>Courses related to science teaching may include mathematics, computer science, history of science, philosophy of science, anthropology, experimental psychology, physical geography, and science education, exclusive of education courses specifically required.

Specialty in Life Science

In order to be in good academic standing and to remain in the program, a student must satisfy the following requirements (in addition to those requirements applicable to all teacher education curricula): (1) a student must have at least 3.5 (A = 5.0) University of Illinois and cumulative grade-point averages and (2) a student must also have at least 3.0 University of Illinois and cumulative grade-point averages in all attempts at science and mathematics courses taken at the University and elsewhere.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209)	0
Introduction to the Teaching of Secondary School Subjects (C&I 101)	2
Field Experience in Secondary Teaching (C&I 219)	2
Secondary Education in the United States (C&I 240)	2
Field Experience in Secondary Education (C&I 229)	2
Educational Psychology (EDPSY 211)	3
Foundations of American Education (E P S 201)	3
Microteaching: Practice in Teaching Techniques (C&I 239)	2
Techniques of Teaching in the Secondary Schools (C&I 241)	4-5
Educational Practice in Secondary Education (ED PR 242)	5-8
Exceptional Students in Secondary Schools (SP ED 218)	1
Total	26-30

REQUIRED CORE COURSES

General Physics (PHYCS 101 and 102, or 106, 107, and 108)	10-12
General chemistry (CHEM 101 and 102, or 107, 108, 109, and 110)	8-10
Life science (BIOL 110 and 111)	10
Descriptive statistics or educational measurement	3-4
Organic chemistry	5
Physiology (experimental, including laboratory)	5
Microbiology (including laboratory <sup>1</sup> )	6
Genetics	4
Vertebrate or invertebrate zoology	3-5
Ecology	3-5
Plant biology (advanced level)	3-5

ELECTIVES

Additional electives in science and courses related to science teaching must be taken to bring the total of such work to approximately 70 semester hours and must be selected in consultation with an adviser. The completion of a teacher education minor in mathematics or one of the physical sciences is recommended.<sup>2</sup>

**TOTAL**, including general education and professional education credits, at least ..... 120

<sup>1</sup>Microbiology laboratory may be taken for 3 to 5 hours credit. The minimum required for teacher education is 3 hours. Students with particular interest in microbiology may take additional hours.

<sup>2</sup>Courses related to science teaching may include mathematics, computer science, history of science, philosophy of science, anthropology, experimental psychology, physical geography, and science education, exclusive of the education courses specifically required.

Specialty in Mathematics

In order to be in good academic standing and to remain in the program, a student must satisfy the following requirements (in addition to those requirements applicable to all teacher education curricula): (1) a student may not receive more than 5 hours with grades of C or below in the calculus sequence, (2) a student must maintain a 3.5 (A = 5.0) grade-point average in mathematics courses beyond calculus, and (3) a student must maintain 3.5 University of Illinois and cumulative grade-point averages.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	1
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	1
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (E P S 201) .....	3
Microteaching (C&I 239), or fifteen clock hours of tutorial experience in mathematics tutoring in an approved mathematics tutorial program .....	0-2
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Total .....	23-28

REQUIRED COURSES

Calculus and analytic geometry .....	10-11
Topics on Geometry (MATH 302) .....	3
Linear algebra (MATH 225, 315, or 318) .....	2-3
Real analysis (MATH 344 or 347) .....	3
Introduction to Abstract Algebra (MATH 317) .....	3
Probability-statistics (MATH 263/STAT 210, MATH 361/STAT 351, or MATH 363/STAT 310) .....	3-4
Computer science (CS 101, 105, or 121) .....	3-4
Each student must also select at least three additional courses (9 hours) from the field lists below. This selection must include courses from at least two different field lists .....	9
Geometry-topology: MATH 303, 323, 332	
Analysis: MATH 247, 306, 285 or 341, 346 or 348, 384	
Algebra: MATH 305, 313, 319, 353, 383	
Probability-statistics: MATH 364, 368, 369	

With the approval of the adviser, a topics course such as MATH 351 may be used in the field list most appropriate to the content of a particular offering of that course.

Total hours in mathematics and computer science .....36-40

**TOTAL**, including general education and professional education credits, at least ..... 120

Specialty in Physical Science

In order to be in good academic standing and to remain in the program, a student must satisfy the following requirements (in addition to those requirements applicable to all teacher education curricula): (1) a student must have at least 3.5 (A = 5.0) University of Illinois and cumulative grade-point averages and (2) a student must also have at least 3.0 University of Illinois and cumulative grade-point averages in all attempts at science and mathematics courses taken at the University and elsewhere.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2



Secondary Education in the United States (C&I 240)	2
Field Experience in Secondary Teaching (C&I 229)	2
Educational Psychology (EDPSY 211)	3
Foundations of American Education (E P S 201)	3
Microteaching: Practice in Teaching Techniques (C&I 239)	2
Techniques of Teaching in the Secondary Schools (C&I 241)	4-5
Educational Practice in Secondary Education (ED PR 242)	5-8
Exceptional Students in Secondary Schools (SP ED 218)	1
Total	26-30

REQUIRED CORE COURSES

General Physics (PHYCS 101 and 102, or 106, 107, and 108)	10-12
General chemistry (CHEM 101 and 102, or 107, 108, 109, and 110)	8-10
Life science (BIOL 110 and 111)	10
Descriptive statistics or educational measurement	3-4
One of the following options must be completed:	

OPTION A: CHEMISTRY

Twenty-two to 24 hours in chemistry beyond the core courses. For more detailed information, refer to the Curriculum Preparatory to the Teaching of Chemistry on page 306. Additional electives in science and courses related to science teaching must be chosen in consultation with an adviser and must be taken to bring the total of such work to approximately 70 semester hours. The completion of a teacher education minor in mathematics, physics, or biology is recommended.<sup>1</sup>

OPTION B: PHYSICS

Nineteen hours in physics beyond the core courses. For more detailed information, refer to the Curriculum Preparatory to the Teaching of Physics on page 315. Additional electives in science and courses related to science teaching must be taken to bring the total of such work to approximately 70 semester hours. The completion of a teacher education minor in either mathematics or chemistry is recommended.<sup>1</sup>

OPTION C: EARTH SCIENCE

Thirty-two hours in earth science beyond the core courses. For more detailed information, refer to the Curriculum Preparatory to the Teaching of Earth Science on page 308. Additional electives in science and courses related to science teaching must be taken to bring the total of such work to approximately 70 semester hours. The completion of a teacher education minor in biology, mathematics, or one of the physical sciences is recommended.<sup>1</sup>

TOTAL, including general education and professional education credits, at least	120
---	-----

<sup>1</sup>Courses related to science teaching may include mathematics, history of science, computer science, philosophy of science, anthropology, experimental psychology, physical geography, and science education, exclusive of education courses specifically required.

Specialty in Social Studies

This specialty offers preparation for teachers of courses in history, sociology, economics, political science, cultural geography, and general social studies.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209)	0
Introduction to the Teaching of Secondary School Subjects (C&I 101)	2
Field Experience in Secondary Teaching (C&I 219)	2
Secondary Education in the United States (C&I 240)	2
Field Experience in Secondary Education (C&I 229)	2
Educational Psychology (EDPSY 211)	3
Foundations of American Education (E P S 201)	3
Microteaching: Practice in Teaching Techniques (C&I 239)	2
Techniques of Teaching in the Secondary Schools (C&I 241)	3
Educational Practice in Secondary Education (ED PR 242)	8
Exceptional Students in Secondary Schools (SP ED 218)	1
Total	28

Two arrangements are provided for completing the major and minor requirements:  
Option A requires a social studies major of at least 41 hours and a minor of at least 20 to 24 hours in an approved teaching field outside the social studies (English, a foreign language, mathematics, etc). The major under Option A consists of two parts: (1) 20 hours in history, and (2) 21 hours distributed to provide one course in each of four of the following fields and some concentration in two of the fields: anthropology, economics, cultural geography, political science, and sociology. These courses must be chosen in consultation with an adviser.

Option B requires a social studies major of at least 36 hours and a minor of at least 20 hours that also is within the social studies field. The major under Option B consists of two parts: (1) 16 to 21 hours in history and (2) 15 to 20 hours distributed to provide courses in three of five fields: anthropology, economics, cultural geography, political science, and sociology. The 20-hour minor is taken entirely in one area (anthropology, economics, geography, political science, or sociology) that has not been included in the major.

The choice of options will be made in consultation with an adviser. Under each option, at least one survey course in American history and one course in American government are required.

**TEACHER EDUCATION MINOR IN ADULT AND CONTINUING EDUCATION**

The purpose of this minor is to offer students a course of study to increase their competence as teachers of adults and to open avenues for expanded career options for those planning to be teachers. This is not a field in which one can be certified for elementary or secondary teaching in Illinois. Students should consult with the continuing education adviser, 333 Education Building, before electing to take this minor.

	HOURS
Adult Learning and Development (AHCE 362) .....	4
Continuing Education General Seminar (AHCE 380) .....	4
Instructional Design (AHCE 363) .....	4
Electives (for the selection of electives, students must have prior approval of the adult and continuing education adviser, 333 Education Building) .....	6
Total .....	18

**APPROVED NONTEACHING MINOR**  
**INSTRUCTIONAL APPLICATIONS OF COMPUTERS<sup>1</sup>**

A minimum of 18 hours, including the following, is required.

COMPUTER SCIENCE	HOURS
Introduction to computer programming (CS 101, 102, 103, 105, or 121) .....	3-4
Advanced or machine-level programming (CS 221 or 300) .....	3
Advanced computer science elective <sup>2</sup> .....	3
Total .....	9-10

**INSTRUCTIONAL APPLICATIONS OF COMPUTERS**

Computer-Assisted Instruction (C&I 335) .....	4
Instructional applications in subject fields (C&I 336; C&I 399, sections AC1, AC2, or AC3; HUMAN 382; or MUSIC 210) .....	2-4
Practicum in instructional applications (C&I 199) .....	3

**ELECTIVE**

A thesis project (C&I 249) .....	3
Total .....	18-24

Students enrolled in this minor may do practice teaching in schools having computer resources for instructional applications.

<sup>1</sup>This is not a subject field to be taught but is an additional resource to assist the teacher in the instruction of a teacher education major. Please consult an adviser.

<sup>2</sup>A computer science elective chosen from among the general areas of programming, numerical analyses, structure and logic, theory of computation, hardware, and applications of computing.

**CURRICULUM IN BUSINESS EDUCATION**

**For the Degree of Bachelor of Science in Business Education**

All students complete requirements as outlined in prescribed courses in business education, general education, professional education, one or more areas of specialization, and general electives. Admission is limited to students who have completed a minimum of 60 semester hours and who meet competitive grade-point average requirements. Each student must complete the requirements of one area of specialization.\* A student may also complete a



second area of specialization or one of the approved teacher education minors. A minimum of 126 hours of credit is required for graduation, excluding basic military science.

For teacher education requirements applicable to all curricula, see pages 87 to 92.

**GENERAL EDUCATION REQUIREMENTS<sup>1</sup>**

All courses must appear on the Council on Teacher Education list of approved courses.

COMMUNICATION SKILLS	HOURS
RHET 105 or 108 and SPCOM 101 or a speech performance elective	
or	
SPCOM 111 and 112 .....	6-7
Business and Administrative Communication (B&TW 251) .....	3
Total .....	9-10

MATHEMATICS AND SCIENCE <sup>2</sup>	HOURS
Statistics (STAT 100 or ECON 171 or 172) .....	3
Calculus (MATH 120 or 134) .....	4-5
Biological science .....	3-4
Physical science .....	3-4
Biological or physical science .....	3-4
Total .....	16-20

HUMANITIES	HOURS
American history .....	3-4
English or American literature .....	3
Electives <sup>3</sup> .....	9
Total .....	15-16

SOCIAL SCIENCES	HOURS
American Government (POL S 150) .....	3
Introduction to Psychology (PSYCH 100 or equivalent) .....	4
Microeconomic or Macroeconomic Principles (ECON 102 or 103) .....	3
Total .....	10

HEALTH AND/OR PHYSICAL DEVELOPMENT	HOURS
Health and/or physical development .....	2

<sup>1</sup>Pending final approval.  
<sup>2</sup>At least one science course must be a laboratory course.  
<sup>3</sup>At least one 3-semester-hour course in non-Western cultures must be taken in humanities.  
\*Although not a requirement for graduation (in terms of credit hours), a minimum of 2,000 hours of employment experience is required in the occupational specialty to be taught.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Nature of the Teaching Profession (VOTEC 101) .....	2
Principles of Vocational and Technical Education (VOTEC 240) .....	2
Curriculum Modification and Individualized Instruction (VOTEC 392) .....	2-4
Technique and Curriculum Development for Teaching Data Processing and Office Machines (VOTEC 271) .....	3
Teaching exceptional students (VOTEC/SP ED 309 or SP ED 307) .....	3-4
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (E P S 201) .....	3
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Educational Practice in Secondary Education (ED PR 242) .....	8
Total .....	31-34

FOUNDATION COURSES IN BUSINESS	HOURS
Principles of Accounting I and II (ACCY 201 and 202) .....	6
The Legal Environment of Business (B ADM 200) .....	3
Consumer education (FACE 170, 270, or 371) .....	3
Computer science (CS 105 or 106) .....	3
Total .....	15

Areas of Specialization

ACCOUNTING-BOOKKEEPING	HOURS
Intermediate Accounting (ACCY 211) .....	3
Cost Accounting (ACCY 221) .....	3
Management and organizational behavior (B ADM 210 or 247) .....	3
Business related electives chosen with approval of adviser .....	9
Total .....	18

ECONOMICS	HOURS
Economic Statistics II (ECON 173) .....	3
Intermediate Microeconomic Theory (ECON 300) .....	3
Intermediate Macroeconomic Theory (ECON 301) .....	3
Business related electives chosen with approval of adviser .....	6-9
Introduction to Public Finance (ECON 214); Labor Problems (ECON 240); Comparative Economic Systems (ECON 255); Economics of Consumption (ECON 313); Introduction to Business Financial Management (FIN 254) (a minimum of three courses from this list) .....	9
Total .....	24-27

MARKETING AND DISTRIBUTIVE EDUCATION	HOURS
Principles of Marketing (B ADM 202) .....	3
Principles of Retailing (B ADM 212) .....	3
Promotion Management (B ADM 337) .....	3
Cooperative Vocational and Technical Education Programs (VOTEC 382) .....	4
Business related electives chosen with approval of adviser .....	6
Total .....	19

SECRETARIAL-OFFICE PRACTICE <sup>1</sup>	HOURS
Cooperative Vocational and Technical Education Programs (VOTEC 382) .....	4
Management and organizational behavior (B ADM 210 or 247) .....	3
Business related electives chosen with approval of adviser .....	12
Total .....	19

Electives to bring total hours to 126. Elective hours must be in business, vocational education, or other areas chosen in consultation with the adviser.

<sup>1</sup>Students who wish to teach in special fields requiring essential competencies in applied areas such as typing, shorthand, and office machines must obtain an acceptable level of proficiency prior to enrollment in the program, or outline a plan whereby these skills may be obtained prior to enrollment in student teaching. Proficiency levels are validated by the business education faculty through examination.

CURRICULUM IN EARLY CHILDHOOD EDUCATION

For the Degree of Bachelor of Science in Early Childhood Education

This program focuses on preparing teachers for preschool, kindergarten, and the early primary grades (one through three) of the elementary school. Graduates of the program qualify for the early childhood certificate. A minimum of 128 semester hours of credit, excluding basic military science, is necessary for graduation.

For teacher education requirements applicable to all curricula, see pages 87 to 92.

GENERAL EDUCATION REQUIREMENTS<sup>1</sup>

COMMUNICATION SKILLS	HOURS
RHET 105 or 108 and SPCOM 101 or a speech performance elective or SPCOM 111 and 112 .....	6-7
Advanced composition (RHET 133, 143, or 144; or B&TW 251, 252, or 302) .....	3
Total .....	9-10

MATHEMATICS/SCIENCE <sup>2</sup>	HOURS
Biological science .....	6-8
Physical science (mathematics not acceptable) .....	6-8
Computers for Elementary Teachers (MATH 200) .....	3
Mathematics for Elementary Teachers (MATH 201) .....	3
Total .....	18-22



HUMANITIES <sup>3</sup>	HOURS
Literature .....	6
Music for Elementary Teachers I (MUSIC 240) .....	3
Art in the Elementary Grades I (ARTED 203) .....	3
Total .....	12

AMERICAN HISTORY	HOURS
HIST 151, 152, 260, 261, or 262 .....	3-4

SOCIAL SCIENCES <sup>3</sup>	HOURS
Introduction to Psychology (PSYCH 100) .....	4
American Government (POL S 150) .....	3
Social sciences elective .....	3-4
Total .....	10-11

HEALTH AND PHYSICAL DEVELOPMENT	HOURS
Health and/or physical development .....	2

**AREA OF CONCENTRATION<sup>3</sup>**  
Eighteen hours of additional study in one academic discipline selected from the categories of mathematics, science, social sciences, or humanities and including 9 semester hours of course work at the 200 level or above. (Consult an adviser for the list of approved disciplines.)

<sup>1</sup>Pending final approval.  
<sup>2</sup>At least one science course must be a laboratory course.  
<sup>3</sup>At least one 3-semester-hour course in humanities, social sciences, or the area of concentration must be taken in non-Western culture.

PROFESSIONAL EDUCATION	HOURS
Foundations of American Education (E P S 201) .....	3
Child Development for Elementary Teachers (EDPSY 236) .....	3
Foundations of Early Childhood Education (C&I 320) .....	5
Principles and Practices in Early Childhood Education (C&I 321) .....	3
Parent Involvement Techniques for Teachers, Comparative Family Organization, Contemporary American Family, Families of Children with Special Needs (C&I 322, ANTH/HDFS 210, HDFS 310, or SP ED 338) (a minimum of one course from this list) .....	3
Educational Practice in Elementary Education (ED PR 232) .....	8
Development of Spoken Language (SPSHS 383) .....	3
Teaching Students with Learning and Behavior Problems in the Regular Classroom, or Intervention Issues and Practices with Young Children with Disabilities (SP ED 308 or 365) .....	3
Educational Practice for Special Fields in Elementary Schools (Prekindergarten Student Teaching) (ED PR 238) .....	3
Principles and Practices in Mathematics Education (C&I 330*) .....	3
Principles and Practices in Science Education (C&I 340*) .....	3
Practicum in Teaching the Arts to Preschool Children (FAA 206) .....	4
Principles and Practices in Social Studies Education (C&I 345*) .....	3
Principles and Practices in Language Arts Education (C&I 360*) .....	3
Principles and Practices in Teaching Literature to Children and Youth (C&I 367) .....	3
Principles and Practices in Reading Education (C&I 370*) .....	3
<b>TOTAL</b> , including general education and professional education credits .....	128

\*Early childhood education students must enroll in the early childhood section of this course.

**CURRICULUM PREPARATORY TO ELEMENTARY SCHOOL TEACHING**  
**For the Degree of Bachelor of Science in Elementary Education**

This program focuses on preparing teachers for grades kindergarten through nine and leads to the Illinois Standard Elementary Certificate. A minimum of 124 semester hours, excluding basic military science, is necessary for graduation.

For teacher education requirements applicable to all curricula, see pages 87 to 92.

**GENERAL EDUCATION REQUIREMENTS<sup>1</sup>****COMMUNICATION SKILLS****HOURS**

RHET 105 or RHET 108 and SPCOM 101 or a speech performance elective  
or

SPCOM 111 and 112 .....	6-7
Advanced composition (RHET 133, 143, or 144; or B&TW 251, 252, or 302) .....	3
Total .....	9-10

**MATHEMATICS AND SCIENCE<sup>2</sup>****HOURS**

Biological science .....	6-8
Physical science (mathematics not acceptable) .....	6-8
Computers for Elementary Teachers (MATH 200) .....	3
Mathematics for Elementary Teachers (MATH 201) .....	3
Total .....	18-22

**HUMANITIES<sup>3</sup>****HOURS**

Literature (including 3 hours of English or American literature) .....	6
Music for Elementary Teachers I and II (MUSIC 240 and 241) .....	6
Art in the Elementary Grades I and II (ARTED 203 and 205) .....	6
Principles and Practices in Teaching Literature to Children and Youth (C&I 367) .....	3
Total .....	21

**AMERICAN HISTORY****HOURS**

HIST 151, 152, 260, 261, or 262 .....	3-4
---------------------------------------	-----

**SOCIAL SCIENCES****HOURS**

Introduction to Psychology (PSYCH 100) .....	4
American Government (POL S 150) .....	3
Cultural geography (GEOG 104, 110, or 210) .....	3-4
Total .....	10-11

**HEALTH/PHYSICAL DEVELOPMENT****HOURS**

Health and/or physical development .....	2
--	---

**AREA OF CONCENTRATION<sup>3</sup>****HOURS**

Eighteen hours of additional study in one academic discipline selected from the categories of mathematics, science, social sciences, or humanities and including 9 semester hours of course work at the 200 level or above. (Consult an adviser for the list of approved disciplines.)

<sup>1</sup>Pending final approval.

<sup>2</sup>At least one science course must be a laboratory course.

<sup>3</sup>At least one 3-semester-hour course in humanities or the area of concentration must be taken in non-Western culture.

**PROFESSIONAL EDUCATION**

Foundations of American Education (E P S 201) .....	3
Child Development for Elementary Teachers (EDPSY 236) .....	3
Theory and Process in Elementary School Teaching (C&I 237) .....	5
Principles and Practices in Social Studies Education (C&I 345) .....	3
Principles and Practices in Science Education (C&I 340) .....	3
Principles and Practices in Language Arts Education (C&I 360) .....	3
Principles and Practices in Reading Education (C&I 370) .....	3
Educational Practice in Elementary Education (ED PR 232) .....	8
Teaching Students with Learning and Behavior Problems in the Regular Classroom (SP ED 308) .....	3
Principles and Practices in Mathematics Education (C&I 330) .....	3
Total .....	37

**ELECTIVES**

To yield a total (with above requirements) of .....	124
---	-----

**CURRICULUM IN TECHNICAL EDUCATION SPECIALTIES****For the Degree of Bachelor of Science in Occupational and Practical Arts Education**

The curriculum outlined below requires a minimum of 128 hours for graduation (excluding basic military science) and provides options for preparing for two types of roles in education. Since the program is currently under revision, students interested in the technical education



specialties curriculum are encouraged to contact the program adviser for information on current degree requirements.

Option A is designed for those persons preparing to obtain certification to teach in public schools, including secondary area vocational centers, high schools, and junior high schools. Examples of technical specialties commonly taught at these levels include ornamental horticulture, programs in industrial arts, and vocational-industrial education in fields such as automotive/power, metalworking, drafting, woodworking, and electricity/electronics.

Option B prepares persons for educational roles in settings in which public school certification is not necessary: for example, community colleges, adult vocational programs, business and industry, or governmental agencies. Examples of technical specialties commonly taught and/or directed in these settings include fields such as police science, fire science, and industrial technologies (automotive, electronics, construction, metalworking, and aviation). Fifty contact hours of supervised observation and participation experience must be completed prior to the educational internship by students pursuing Option B.

For teacher education requirements applicable to all curricula leading to public school certification, see pages 87 to 92.

GENERAL EDUCATION REQUIREMENTS<sup>1</sup>

All courses must appear in the Council on Teacher Education list of approved courses.

COMMUNICATION SKILLS	HOURS
RHET 105 or RHET 108 and SPCOM 101 or a speech performance elective	
or	
SPCOM 111 and 112 .....	6-7
Business and technical writing or rhetoric (B&TW 251, 252; or RHET 133 or 143) .....	3
Total .....	9-10

MATHEMATICS AND SCIENCE <sup>2</sup>	HOURS
Mathematics .....	3
Biological science .....	3-4
Physical science .....	3-4
Biological or physical science .....	3-4
Total .....	12-15

HUMANITIES	HOURS
American history .....	3-4
English or American literature .....	3
Electives <sup>3</sup> .....	9
Total .....	15-16

SOCIAL SCIENCES	HOURS
American Government (POL S 150) .....	3
Introduction to Psychology (PSYCH 100 or equivalent) .....	4
Microeconomic or Macroeconomic Principles (ECON 102 or 103) .....	3
Total .....	10

HEALTH AND/OR PHYSICAL DEVELOPMENT	HOURS
Health and/or physical education development .....	2

<sup>1</sup>Pending final approval  
<sup>2</sup>At least one science course must be a laboratory course.  
<sup>3</sup>At least one 3-semester-hour course in non-Western cultures must be taken in humanities.

PROFESSIONAL EDUCATION REQUIREMENTS COMMON TO ALL TECHNICAL EDUCATION SPECIALTIES

	HOURS
Foundations of American Education (E P S 201) .....	3
Principles of occupational and practical arts education .....	2-6
Educational Psychology (EDPSY 211) .....	3
Methods of teaching .....	3
Pre-educational practice or pre-educational internship experience .....	3
Curriculum development where required or elective approved by adviser .....	3-4
Teaching exceptional students (Option A) (VOTEC/SP ED 309 or SP ED 307) .....	3-4
Educational practice (Option A) or educational internship (Option B) .....	5-8
Total .....	22-34

TECHNICAL EDUCATION SPECIALTY REQUIREMENTS

The technical education specialties curriculum provides the opportunity for planning an individual program of study under the supervision of a faculty adviser in the student’s special field(s) of interest. Examples of specific programs are on file with the Department of Vocational and Technical Education to aid in program planning.

Each student will develop a pattern of courses in one or more technical specialties and supporting courses earning at least 48 semester hours.

SUPERVISED OCCUPATIONAL EXPERIENCE

Cooperative arrangements have been made by the University for supervised occupational experience of technical education specialty students while employed in selected locations. This program is designed for students preparing to become certified vocational or technical specialty instructors, for students preparing for employment in training departments maintained by business or industrial organizations, and for students preparing to be teachers of selected occupations. Students may accumulate up to 17 semester hours of credit through registration in VOTEC 189—Supervised Occupational Experience.

Cooperative arrangements have been established with some community colleges whereby registration in this program may be accomplished after completion of the freshman year.

CURRICULUM PREPARATORY TO TEACHING PERSONS WITH MODERATE TO SEVERE DISABILITIES

For the Degree of Bachelor of Science in Special Education

This two-year curriculum is designed to prepare students to teach students with moderate to severe disabilities. An applicant must have a cumulative grade-point average of at least 3.5 (A = 5.0), have prior experience<sup>1</sup> with moderately and severely disabled persons, and have attained junior standing (at least 60 semester hours of baccalaureate credit) upon enrollment in the program. A minimum of 124 hours of credit, excluding basic military science, is required for graduation.

To allow completion of degree requirements within two years, applicants must have earned 60 hours and must have fulfilled all or most of the following general education and preferably some of the professional education requirements prior to enrollment. Admission is made by formal application during the spring semester of the sophomore year.

For teacher education requirements applicable to all curricula leading to public school certification, see pages 87 to 92.

GENERAL EDUCATION REQUIREMENTS<sup>2</sup> HOURS

All courses must appear on the Council on Teacher Education list of approved courses.

COMMUNICATION SKILLS HOURS

RHET 105 or 108 and SPCOM 101 or a speech performance elective	
or	
SPCOM 111 and 112 .....	6-7
Advanced composition (RHET 133, 143, 144, or B&TW 251) .....	3
Total .....	9-10

MATHEMATICS AND SCIENCE<sup>3</sup>

Mathematics .....	3
Biological science .....	6
Physical science <sup>3</sup> .....	6
Total .....	15

HUMANITIES<sup>4</sup> HOURS

American history .....	3-4
English or American literature .....	3
Electives .....	9
Total .....	15-16

SOCIAL SCIENCES<sup>4</sup> HOURS

American Government (POL S 150) .....	3
Introduction to Psychology (PSYCH 100 or equivalent) .....	4
Child Psychology (PSYCH 216) .....	3
Electives .....	6
Total .....	16



HEALTH AND/OR PHYSICAL DEVELOPMENT	HOURS
Health and/or physical development .....	2

<sup>1</sup>Applicants may contact the Department of Special Education for further information, if needed, on the prior experience requirement.  
<sup>2</sup>Pending final approval.  
<sup>3</sup>At least one science course must be a laboratory course.  
<sup>4</sup>At least one 3-semester-hour course in humanities or social sciences must be taken in non-Western culture.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
History and philosophy of education (E P S 201, 300, 301, 302, 303, 304, 305, 309, or 315) .....	3
School and Community Experiences (ED PR 150, Section MSH) .....	4
Educational Practice in the Education of Exceptional Children (ED PR 220, Section MSH, secondary focus) .....	6
Instructional Design (EDPSY 363) .....	4
Systematic Instruction for Students with Special Needs (SP ED 336) .....	4
Total .....	21

SPECIAL EDUCATION CORE REQUIREMENTS	HOURS
Characteristics and Methods of Educating the Multiply Handicapped (SP ED 332) .....	3
Development of Spoken Language (SPSHS 383) .....	3
Language Disorders in Children (SPSHS 386) .....	3
Educational Practice in the Education of Exceptional Children (ED PR 220, Section MSH, elementary focus) .....	8
Exceptional Children (SP ED 117) .....	3
Introduction to Mental Retardation (SP ED 322) .....	3
Tests and Measurements in Special Education (SP ED 324) .....	2
Behavior Analysis for Teachers: Applications with Exceptional Individuals (SP ED 335) .....	3
Curriculum Development and Classroom Organization for Students with Moderate and Severe Handicaps (SP ED 337) .....	4
Families of Children with Special Needs (SP ED 338) .....	3
Vocational Training for Mentally Retarded Adolescents and Adults (SP ED 345) .....	3
Total .....	38

ELECTIVES	
To yield a total (with above requirements) of .....	124

## College of Engineering

Engineering Hall, 1308 West Green Street, Urbana, IL 61801

Departments and Curricula .....	174
Admission Requirements .....	175
General Education Requirements .....	176
Special Programs .....	177
International Opportunities .....	182
Honors Programs .....	184
Electives .....	185
Curricula .....	186

The College of Engineering prepares men and women for professional careers in engineering and for responsible technical and semitechnical positions in industry, commerce, education, and government. The college provides training in the mathematical and physical sciences and their application to a broad spectrum of technological and social requirements of society. The engineering curricula, though widely varied and specialized, are built on a general foundation of scientific theory applicable to many different fields. Work in the classroom and laboratory is brought into sharper focus by practical problems that the student solves by methods similar to those of practicing engineers.

Although each student pursues a curriculum chosen to meet individual career goals, all students take certain common courses. Basic courses in mathematics, chemistry, physics, rhetoric, and computer science are required in the first two years. Although the curricula are progressively specialized in the third and fourth years, each student is required to take some courses outside his or her chosen field.

Nontechnical courses are included in each curriculum; they may be required or elective. Many nontechnical courses satisfy the broad objectives of the humanities and social sciences requirements of the engineering curricula—making the student keenly aware of the urgent problems of society and developing a deeper appreciation of human cultural achievements. The humanities and social sciences courses are usually drawn from the liberal arts and sciences, economics, and approved courses in fine and applied arts. A student who desires a broader cultural background should consider a combined engineering-liberal arts and sciences program; see page 177.

The Engineering Library, on the first three floors of Engineering Hall, is a major resource center for students in all curricula. It contains the reference books, periodicals, catalogs, and technical publications that students need constantly and also provides materials for general reading and private research.

### DEPARTMENTS AND CURRICULA

The College of Engineering includes the Departments of Aeronautical and Astronautical Engineering, Civil Engineering, Computer Science, Electrical and Computer Engineering, General Engineering, Materials Science and Engineering, Mechanical and Industrial Engineering, Nuclear Engineering, Physics, and Theoretical and Applied Mechanics. The undergraduate curricula described later in this section are administered by these units. The work in chemical engineering is administered by the College of Liberal Arts and Sciences. The curriculum in agricultural engineering is administered jointly by the College of Agriculture and the College of Engineering.

The listing by the Accreditation Board for Engineering and Technology of the programs of the College of Engineering, required by the Engineering Accreditation Commission, is: Aeronautical and Astronautical Engineering bdc [1950]\*; Agricultural Engineering bdc [1950]; Ceramic Engineering bdc [1936]; Chemical Engineering bdc [1936]; Computer Engineering bdc [1978]; Electrical Engineering bdc [1936]; Engineering Mechanics bdc [1960];



General Engineering bdC [1936]; Industrial Engineering bdC [1960]; Mechanical Engineering bdC [1936]; Metallurgical Engineering bdC [1936]; and Nuclear Engineering bdC [1978].

Each student entering the College of Engineering declares his or her choice of a curriculum. All first-year students follow the common program for freshmen shown below.

\*b = bachelor's degree, basic = level accreditation; d = day; C = co-op feature meeting special requirements of the Accreditation Board for Engineering and Technology criteria

ADMISSION REQUIREMENTS

Entering Freshmen

Students seeking admission to the College of Engineering who are recent high school graduates or who have earned fewer than 12 semester hours of credit at other collegiate institutions are classified as new freshmen and must meet the entrance requirements to the College of Engineering that are specified for new freshmen. Students are admitted to the college on a best-qualified basis as determined by ACT composite scores and high school percentile ranks supplied on high school transcripts.

Although new freshmen take a common, or similar, program (shown below), they are asked to choose a curriculum in which they wish to study. A freshman usually can change the curriculum of study during the freshman year. Some restrictions apply when differential admission procedures are used. Because the program of study is essentially the same for all freshman students, such changes can be made without loss of credit toward graduation.

The advanced Mathematics Placement Test is required of all freshman students entering the College of Engineering. They are urged to take the examination during the spring testing period before enrollment.

The Chemistry Placement Test is required of all entering freshmen. This examination will be used to place a student in a background course for engineers, CHEM 100, or in the normal beginning course for engineers, CHEM 101. A student with a superior background in chemistry may take the chemistry proficiency test, which, if passed, will place the student in CHEM 102 and grant the student 3 hours of proficiency credit for CHEM 101; the additional 1 hour must be made up as a free elective. A student having advanced placement credit in mathematics, chemistry, or physics (see pages 30 and 32) will receive credit toward graduation and will be placed in advanced course work consistent with academic preparation.

COMMON FIRST-YEAR PROGRAM HOURS

Engineering lectures .....	0
Chemistry <sup>1</sup> .....	6-8
Mathematics <sup>2</sup> .....	8-10
Physics .....	4
Rhetoric .....	4
Engineering electives .....	0-6
Electives .....	3-6
Total .....	31-36

<sup>1</sup>The normal freshman chemistry sequence is CHEM 101 and 102.  
<sup>2</sup>Entering freshmen who do not pass the Mathematics Placement Test will take MATH 112 and MATH 114 or 116.

Transfer Students

The College of Engineering admits qualified transfer students from both community and four-year colleges and has worked closely with these schools in Illinois to implement coordinated engineering programs.

Students may complete the first two years of study in other accredited institutions and transfer to the University of Illinois at Urbana-Champaign with little or no loss of credit, provided that they follow the proper program. A suggested list of courses that should be completed in the first two years before transferring is given below. A range of hours is given in each of these course work areas, because the major concern is that students have an adequate coverage of basic subject matter rather than specific numbers of hours in given areas. Ranges are given applicable to both quarter-hour and semester-hour systems.

<b>SUGGESTED COORDINATED ENGINEERING COURSES</b>	<b>RANGE OF HOURS</b>	
	<b>Quarter Hours</b>	<b>Semester Hours</b>
Freshman chemistry .....	10-15 .....	6-10
General physics (taught using calculus) .....	15-18 .....	10-12
English (rhetoric and composition) .....	6-9 .....	4-6
Mathematics (total mathematics credits) .....	20-24 .....	15-17
Calculus or calculus and analytic geometry .....	16-20 .....	12-14
Differential equations, linear algebra .....	8-10 .....	6
Engineering graphics (mechanical drawing and/or descriptive geometry) ....	4-6 .....	3-4
Applied mechanics — statics .....	3-4 .....	2-3
Applied mechanics — dynamics .....	3-6 .....	2-3
Computer science (FORTRAN programming) .....	3-4 .....	3

<b>OTHER COURSES</b>	<b>RANGE OF HOURS</b>	
	<b>Quarter Hours</b>	<b>Semester Hours</b>
Social sciences and humanities .....	9-27 .....	6-18
Statistics .....	4 .....	3

Students should complete as many of the suggested courses as possible and select additional courses from those in the Other Courses list above to complete full-time study programs. Normally, a student will complete all of the suggested courses and 8 to 10 additional semester hours of course work. This additional course work may include social sciences and humanities electives but could include work in computer science or advanced mathematics.

Before selecting social sciences and humanities electives, students should familiarize themselves with the elective requirements of the college listed on pages 185 and 186. A student seeking to transfer to the college must have a cumulative grade-point average of at least 3.6 (A = 5.0) to apply but competitive standards for admission are usually higher than the 3.6 level.

Students may transfer to the college for the fall, spring, or summer session provided they have met competitive grade-point average cutoffs and have completed 60 or more semester hours of work. Transfer students are required to have also completed the basic mathematics (through calculus), physics, chemistry, and English (rhetoric and composition) sequences in the 60 or more semester hours required for transfer. Transfer students starting their studies in the fall semester are allowed to advance enroll during the preceding summer. Students are informed of this opportunity after they are admitted. Questions are invited concerning this procedure.

A few sophomore-level technical courses may not be offered by most community colleges. However, junior-level transfer students can usually arrange their programs on the Urbana-Champaign campus so that all technical requirements can be completed in a four-semester period on this campus if they wish to do so. If the number of hours remaining to complete a degree requires more than four semesters, the student may enroll for an additional summer session or semester.

Students planning to transfer to the College of Engineering are encouraged to write to the Office of the Associate Dean for Undergraduate Studies, University of Illinois at Urbana-Champaign, 207 Engineering Hall, 1308 West Green Street, Urbana, IL 61801, or to the head of the department to which they wish to transfer. A student should complete all sequences in mathematics, physics, chemistry, and English at one institution to maintain proper continuity. In cases where this is not possible, a student may enroll in a summer session to make up deficiencies.

Transfer students are not required to take freshman guidance examinations or any other examinations to qualify for admission to the College of Engineering, but all other admission regulations apply to them. Transfer students should consult Admission of Transfer Applicants on page 18 for general information concerning transfer to the University of Illinois at Urbana-Champaign, and students from community colleges should note especially the rules regarding community colleges on page 19.

## GENERAL EDUCATION REQUIREMENTS

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.



SPECIAL PROGRAMS

Combined Engineering-Liberal Arts and Sciences Program

A five-year program of study permits a student to earn a Bachelor of Science degree in a field of engineering from the College of Engineering and a Bachelor of Arts or a Bachelor of Science degree from the College of Liberal Arts and Sciences at the Urbana-Champaign campus.

This program affords the student the opportunity to prepare for a career of an interdisciplinary nature. By selecting an appropriate liberal arts and sciences major in combination with the desired engineering curriculum, it is possible for a student to qualify for new careers in industry, business, or government. A student who desires a broader background than can be provided in the four-year engineering curricula can develop a program that includes a well-rounded cultural education in addition to an engineering specialty. Each student must file an approved program with the engineering college office and with the liberal arts and sciences college office.

Advisers in both colleges assist in planning a program of study to meet the needs and requirements for both degrees. Most combinations of engineering and liberal arts curricula may be completed in ten semesters if the student does not have deficiencies in the entrance requirements of either college.

Most engineering curricula can be combined with one of a variety of liberal arts and sciences majors including languages, social sciences, humanities, speech communication, and philosophy. This combined program operates under the following conditions:

- Students entering the program must meet admission requirements for both colleges.
- A student who starts in the program and decides to transfer from it is subject to the existing graduation requirements of the college of his or her choice.
- The degrees of Bachelor of Science in engineering and Bachelor of Arts or Bachelor of Science in liberal arts and sciences are awarded simultaneously. No student in the combined program is permitted to receive a degree from either college before the completion of the entire program.
- Participants must satisfy the College of Liberal Arts and Sciences foreign language graduation requirement.
- Students electing advanced Reserve Officers’ Training Corps and Naval ROTC programs are required to meet these commitments in addition to the combined program as outlined.
- Students having 75 or more hours of transfer credit are not advised to enter this program, because they cannot ordinarily complete it in five years.
- Students transferring from other colleges and universities must plan to complete at least one year in the College of Liberal Arts and Sciences at Urbana-Champaign and one year in the College of Engineering at Urbana-Champaign to satisfy residency requirements if both degrees are to be granted here. Other students should plan to spend a minimum of two years in each college.
- A student is expected to maintain at least a 3.5 (A = 5.0) grade-point average to be accepted or to continue in the program. A higher grade-point average may be required in the future.

During the first year, students are enrolled in the common freshman program for engineers, which is taken in the College of Engineering (see page 174). Students are enrolled in the College of Liberal Arts and Sciences for the second and third years and in the College of Engineering for the fourth and fifth years. A typical combined program follows:

SECOND YEAR	
FIRST SEMESTER	HOURS
Biological science .....	4
Calculus and analytic geometry .....	5
Humanities or social sciences .....	4
Language .....	4
Total .....	17

THIRD YEAR	
FIRST SEMESTER	HOURS
Humanities or social sciences .....	4
Languages .....	4
Liberal arts and science majors .....	6
Physics (light, sound, and the structure of matter) .....	4
Total .....	18

SECOND YEAR	
SECOND SEMESTER	HOURS
Engineering subject .....	4
Language .....	4
Liberal arts and sciences major .....	3
Physics (heat, electricity, and magnetism) .....	4
Total .....	15

THIRD YEAR	
SECOND SEMESTER	HOURS
Engineering subjects .....	6-8
Humanities or social sciences .....	4
Language .....	4
Liberal arts and sciences major .....	3
Total .....	17-19

FOURTH YEAR	
FIRST SEMESTER	HOURS
Engineering subjects .....	15
Humanities or social sciences .....	4
Total .....	19

FIFTH YEAR	
FIRST SEMESTER	HOURS
Engineering subjects .....	15-17

FOURTH YEAR	
SECOND SEMESTER	HOURS
Engineering subjects .....	18

FIFTH YEAR	
SECOND SEMESTER	HOURS
Engineering subjects .....	18

It may be necessary to adjust the above program to allow the student to take more hours in the liberal arts and sciences program.

For further information about this program, students should write to the Office of the Associate Dean in either the College of Engineering or the College of Liberal Arts and Sciences at the Urbana-Champaign campus.

**Affiliations with Other Liberal Arts Colleges**

Through a program of affiliation between the College of Engineering and a number of liberal arts colleges, a student may enroll in a five-year program, earn a bachelor's degree from one of these colleges, and at the same time earn a bachelor's degree in engineering from the University of Illinois at Urbana-Champaign. In general, students spend the first three years at the liberal arts college and the final two years at the University of Illinois at Urbana-Champaign. At the time of transfer, students must meet competitive transfer admission requirements.

Increasing numbers of engineering graduates enter leadership roles in industry and government and require a greater understanding of the impact of technology on society. The five-year program encourages a student to develop a broad understanding of the social sciences and humanities while striving for excellence in technical studies. These affiliations have the added benefit of allowing students to take preengineering studies at liberal arts schools chosen on the basis of geographical location, prestige, religious principles, family circumstances, or other personal reasons. Students transferring from these programs must be residents of Illinois to qualify for admission to UIUC.

Colleges affiliated with the College of Engineering are:

Adrian College Adrian, Michigan	Anderson College Anderson, Indiana	Augustana College Rock Island, Illinois
Beloit College Beloit, Wisconsin	Butler University Indianapolis, Indiana	Carthage College Kenosha, Wisconsin
De Paul University Chicago, Illinois	Eastern Illinois University Charleston, Illinois	Elmhurst College Elmhurst, Illinois
Grace College Winona Lake, Indiana	Greenville College Greenville, Illinois	Illinois Benedictine College Lisle, Illinois (formerly St. Procopius College)
Illinois College Jacksonville, Illinois	Illinois State University Normal, Illinois	Illinois Wesleyan University Bloomington, Illinois
Knox College Galesburg, Illinois	Lewis University Lockport, Illinois	Loras College Dubuque, Iowa
Loyola University of Chicago Chicago, Illinois	MacMurray College Jacksonville, Illinois	McKendree College Lebanon, Illinois
North Central College Naperville, Illinois	Northern Illinois University DeKalb, Illinois	Olivet Nazarene College Kankakee, Illinois
Saint Ambrose College Davenport, Iowa	Saint Joseph's College Rensselaer, Indiana	Wartburg College Waverly, Iowa
Western Illinois University Macomb, Illinois	Wheaton College Wheaton, Illinois	Yankton College Yankton, South Dakota



Cooperative Engineering Education Program

A five-year program in cooperative engineering education is available to students in all curricula in the college. A student in the program alternates periods of attendance at UIUC with periods of employment in industry or government. The employment, which is an essential element in the educational process, is with the same company each work period and is related to the student’s field of study. The assignment increases in difficulty and responsibility with each succeeding period off campus. A list of participating employers may be obtained by writing to the Cooperative Engineering Director, University of Illinois at Urbana-Champaign, 207 Engineering Hall, 1308 West Green Street, Urbana, IL 61801.

Students who wish to join the program must first enroll in the College of Engineering at the University of Illinois at Urbana-Champaign. If accepted by a participating employer, the first off-campus educational assignment will be scheduled during the summer after the freshman year, or the student will attend the summer session and have the first off-campus assignment during the fall semester after the freshman year. Typical schedules are illustrated in a brochure available from the cooperative engineering office.

Sophomores and advanced undergraduates are eligible for the program, which will still require five years to complete, but they will have fewer off-campus assignments.

Students enrolled in the cooperative education program are registered in the University and are considered to be full-time students for the entire five years required by the program. Entries indicating participation in the program are entered on the student’s official transcript each semester and summer that he or she is enrolled. Upon successful completion of the program, the student is awarded a certificate signed by the dean of the college and the off-campus coordinator and receives the regular diploma awarded for completing the degree requirements.

College Option in Bioengineering

Bioengineering is a broad, interdisciplinary field that brings together engineering, biology, and medicine to create new techniques, devices, and understanding of living systems to improve the quality of human life. Its practice ranges from the fundamental study of the behavior of biological materials to the design and development of medical instruments.

Any of the existing engineering curricula can provide a good foundation for work in bioengineering. However, the engineering undergraduate needs additional education in the biologically oriented sciences to obtain a strong background for bioengineering. With such a background, the student should be able to progress rapidly on the graduate level in any branch of bioengineering. In industry, the graduate will be competent to handle engineering tasks related to biology.

The courses shown below have been selected specifically for the undergraduate engineering student. There are three alternatives that can be selected to meet the individual student’s plans, designated A, B, and C. The listing of bioengineering courses is not complete but represents examples of courses that are currently available. An additional course in organic chemistry or biochemistry would be required for entrance to most medical schools. A minimum of 16 hours is required for the option. To obtain recognition for the bioengineering option, students must register in the Office of the Associate Dean for Undergraduate Studies, 207 Engineering Hall.

	ALTERNATIVES		
BIOLOGY CORE .....	A .....	B .....	C .....
CHEM 131—Elementary Organic Chemistry .....	3 .....	3 .....	3 .....
PHYSL 103—Introduction to Human Physiology .....		4 .....	
PHYSL 301—Cell and Membrane Physiology <sup>1,4</sup> .....	3 .....	3 .....	3 .....
PHYSL 302—Systems and Integrative Physiology <sup>1</sup> .....			3 .....
PHYSL 303—Cell and Membrane Physiology Laboratory .....	2 .....	2 .....	2 .....
PHYSL 304—Systems and Integrative Physiology Laboratory <sup>2</sup> .....		2 .....	2 .....
VB 316—Physiology II .....		4 .....	
Mammalian physiology laboratory <sup>3</sup> .....		1-2 .....	
Total hours for the biology core .....	13-14 .....	14 .....	13 .....

<sup>1</sup>Biology prerequisites will be waived by the instructor for advanced engineering students.  
<sup>2</sup>Engineering students taking Core B are not required to take PHYSL 302 because PHYSL 103 is taken.  
<sup>3</sup>Several possible courses; consultation with bioengineering adviser is required.  
<sup>4</sup>BIOPH 301 may be substituted for PHYSL 301.

<b>BIOENGINEERING AND RELATED COURSES (ONE OR MORE)</b>	<b>HOURS</b>
BIOEN 120—Introduction to Bioengineering .....	1
BIOEN 199—Undergraduate Open Seminar .....	0-4
BIOEN 270—Individual Study .....	0-4
BIOEN 270D—Radiation Oncology .....	2
BIOEN 303—Bone and Cartilage Biology (same as VB 303) .....	2
BIOEN 306—Veterinary Orthopedic Mechanics (same as VB 306) .....	3
BIOEN 308—Implant Materials for Medical Applications .....	3
BIOEN 314—Biomedical Instrumentation (same as ECE 314) .....	3
BIOEN 315—Biomedical Instrumentation (laboratory) (same as ECE 315) .....	2
BIOEN 370—Special Topics in Bioengineering (various sections cover separate courses, which may change each semester) .....	0-4
BIOEN 370L—Clinical Image Processing .....	3
BIOEN 375—Modeling of Biological Systems (same as ECE 375) .....	3
CHEM 323—Applied Electronics for Scientists .....	4
ECE 373—Engineering Acoustics .....	3
ECE 374—Ultrasonic Techniques .....	3
ENG H 297—Honors Projects in Bioengineering .....	1-4
GE 293—Special Topics in Biomechanics .....	1
IE 305—Principles of Ergonomics (same as PHYSL 305) .....	4
NUC E 241—Introduction to Radiation Protection .....	3
NUC E 341—Principles of Radiation Protection .....	4
PHYSL 331—General Radiobiology .....	4
Other departmental specialties related to bioengineering (taken as electives) .....	3-4

## College Option in Polymer Science and Engineering

Polymer science and engineering is a broad interdisciplinary field that brings together various aspects of chemistry, physics, and engineering for the understanding, development, and application of the materials science of polymers. Many of the existing engineering curricula provide a good foundation for work in polymer science and engineering. However, the undergraduate student needs additional courses specifically dealing with the science and engineering of large molecules. With such a background, the student should be able to progress rapidly in industry or on the graduate level. In addition to those students specifically desiring a career in polymers, this option also can be valuable to students interested in the development, design, and application of materials in general.

The courses listed below have been selected specifically to give an undergraduate student a strong background in polymer science and engineering. A minimum of eight courses is required, several of which the student would normally take to satisfy the requirements of the basic degree. To obtain recognition for the polymer science and engineering option, students must register in the Office of the Associate Dean for Undergraduate Studies, 207 Engineering Hall. The student should also consult a member of the polymer group faculty when considering the option and deciding on a program.

### CORE COURSES

MATSE 380<sup>1</sup>—Introduction to Polymers, or CH E 392—Polymer Engineering and Science  
 MATSE 381—Polymer Characterization Laboratory  
 ME 393—Modeling of Materials Processing, or MATSE 390a—Plastics Engineering

### THERMODYNAMICS (one of the following)

MATSE 301—Thermodynamics of Materials  
 ME 205—Thermodynamics  
 PHYCS 361—Thermodynamics and Statistical Mechanics  
 CH E 370—Chemical Engineering Thermodynamics  
 CHEM 342—Physical Chemistry 1, and CHEM 344—Physical Chemistry II

### MECHANICAL PROPERTIES

TAM 221—Elementary Mechanics of Solids

### CHEMISTRY

CHEM 136—Basic Organic Chemistry

### RELATED COURSES (at least two of the following)<sup>2</sup>

TAM 328—Mechanical Behavior of Composite Materials  
 MATSE 320—Surfaces and Colloids  
 MATSE 390b—Polymer Chemistry  
 MATSE 390c—Polymer Physical Chemistry I  
 MATSE 390d—Polymer Physics  
 CH E 387—Applied Chemical Kinetics and Catalysis



PHYCS 350—Biomolecular Physics  
 PHYCS 389—Introduction to Solid-State Physics  
 CHEM 336—Organic Chemistry  
 CHEM 337—Organic Chemistry  
 TAM 321—Advanced Mechanics of Solids  
 ME 346—Materials and Design  
 TA 380—Advanced Textiles

<sup>1</sup>The numbers for the MATSE courses are subject to change.

<sup>2</sup>Other polymer-related courses may be substituted upon petition.

## College Option in Manufacturing Engineering

Recent national attention on quality and productivity improvements in the manufacturing sector has led to a resurgence of emphasis and activity in manufacturing engineering. The demand is increasing for engineers who will be qualified to design and operate the factories of the future. This field requires the integration of information technology, materials, and machines. It is believed that no single engineering discipline can supply the type of engineer needed for system integration. The proposed option in manufacturing engineering provides an opportunity to engineering students in all major disciplines to learn a common language of manufacturing systems engineering.

This program is intended for engineering students in all major disciplines who are interested in manufacturing engineering. The option in manufacturing engineering requires a total of 18 semester hours of course work. Only a small number of these courses may be above and beyond the requirements of the student's regular curriculum, particularly if the student can make use of technical elective or similarly designated hours.

The course requirements for the option are:

- A single Level 1 course, MFG E 210—Introduction to Manufacturing Systems (3 hours), required of all students taking the option.
- Six hours of Level 2\* courses that survey two of the four major technical areas of relevance to manufacturing.
- Nine semester credit hours of Level 3\*\* courses. In order that the option have some coherence, the three courses must be selected from specified groups of courses related to the Level 2 courses.

Courses within a given discipline that are required for completion of the bachelor's degree in that discipline may not be used by students in that discipline to satisfy the Level 3 course requirements of the option.

It is recommended that one of the Level 3 courses be an independent study project course dealing with an open-ended manufacturing design problem defined by an outside organization. Students enrolled in the project course will apply engineering principles and techniques learned from manufacturing-related courses and topics covered in their major disciplines in the formulation, analysis, and solution of manufacturing design problems.

### \*Level 2 Courses:

MFG E 320—Decision Making and Control Applications in Manufacturing (3 hours)  
 MFG E 330—Interfacing Methods for Manufacturing Systems (3 hours)  
 MFG E 340—Processing and Finishing of Materials (3 hours)  
 MFG E 350—Information Management for Manufacturing Systems (3 hours)

### \*\*Level 3 Courses:

Each Level 2 course is supported by approximately twenty to thirty Level 3 courses that now exist within the course structures of the various engineering departments. These courses provide students with the opportunity to specialize in one or more aspects of manufacturing engineering.

The course of study for a manufacturing option thus provides a student with a flexible program that can be tailored to suit the area of interest and the major engineering discipline in which the student is enrolled. To foster an interdisciplinary learning environment, a set of laboratories is being developed. The main laboratory is the Intelligent Manufacturing Systems Laboratory, which consists of a flexible manufacturing cell.

The director of the program is Professor Shiv G. Kapoor, Department of Mechanical and Industrial Engineering (phone 333-3432). Additional information can be obtained from him or at 207 Engineering Hall.

## **Thesis**

With the approval of the department concerned, a senior of high standing in any curriculum may substitute, for one or more technical courses, an investigation of a special subject and write a thesis.

## **Curriculum Modification**

A student interested in modifying his or her curriculum may do so by checking with his or her department and adviser to determine the petition procedure for making a curriculum modification.

## **Special Curricula**

Students of high scholastic achievement, with exceptional aptitudes and interests in special fields of engineering and their application, may be permitted to vary the course content of the standard curricula in order to emphasize some phases not included or not encompassed by the usual course substitution and selection of electives. These unwritten curricula, however, must include all of the fundamental courses of the standard curricula, the variations being made mainly in the so-called applicatory portions of the standard curricula of the college. The program of study of each student permitted to take such a special curriculum must be approved by a committee of the college, in consultation with the head of the department in which the student is registered and with a faculty member of the college. This faculty member automatically becomes the student's adviser in charge of registration and other matters pertaining to the approved program.

## **Advanced ROTC Training Combined with Engineering**

A student in the College of Engineering may elect to participate in the Reserve Officers' Training Corps Program and earn a commission in the U.S. Army Reserve, Air Force Reserve, or Naval Reserve. A commission is awarded simultaneously with the awarding of the Bachelor of Science degree in an engineering field. Participation in these programs is limited to students who apply to and are selected by the army, air force, and navy units at the University. Monthly stipends are paid to those selected for advanced military training.

These programs require from one to three summer camps or cruises and the earning of specified numbers of credits in advanced military courses. Credits earned appear in all academic averages computed by the College of Engineering. Basic military courses (100-level) do not count toward graduation. A maximum of 6 hours of 200-level military science courses may be used as free electives. A student should plan on taking nine semesters to obtain both a bachelor's degree in engineering and a commission in the ROTC program. For further information, write directly to the professor of military science, the professor of aerospace studies, or the professor of naval science. (See pages 80 through 86.)

## **INTERNATIONAL OPPORTUNITIES**

### **International Minor in Engineering**

Many College of Engineering graduates will be involved in international activities during their professional careers. In anticipation of such involvement, the college offers an opportunity for students to complete an international minor in any of the regular degree programs offered. More than 95 percent of the engineering students have had language training in high school, and this program allows them to continue their studies in related areas. The requirements for the completion of the international minor are as follows. The student must:

- complete all degree requirements in the student's selected engineering discipline;
- complete foreign language studies in a language of a chosen geographical area (language level required will vary with the geographical area selected);
- complete a minimum of 21 hours of cultural or language studies related to the geographical area of concentration; 9 hours must be other than language credit and include at least one 300-level course;
- complete a period of involvement (a work period, study period, internship, or other form of involvement) of at least eight weeks in the geographical area of concentration.

The student will be expected to select a specific geographical area for concentration that will be recognized in the designation of the minor, such as international minor—Latin American studies. Course work selected for the minor must be approved by the Office of the Associate Dean for Undergraduate Studies, 207 Engineering Hall. A list of suggested courses is available from that office.



Through its association with the International Association for the Exchange of Students for Technical Experience, the college can assist students in gaining some work opportunities in other countries and also in participating in educational exchange programs at institutions in other countries that will help the student meet the "period of involvement" requirement. Students with foreign language backgrounds before entering the college will normally be able to complete the program in four academic years. Those not having this background, or taking a year of study in a foreign institution, may take four and one-half to five years.

### **Elmendorf World Citizenship Travel Awards**

An alumnus of the College of Engineering, Edward Elmendorf, established this fund to encourage engineering students to seek an understanding of the responsibilities of world citizenship. Engineering students traveling abroad as part of the educational programs sponsored by the College of Engineering are eligible for some financial aid. These funds have certain requirements for qualification. Further information about these travel awards may be obtained from the College of Engineering.

### **On-the-Job Training in Foreign Countries**

The International Association for the Exchange of Students for Technical Experience is a private, nonprofit organization that enables students of engineering, architecture, and the sciences to obtain on-the-job training in foreign countries. Any student, undergraduate or graduate, who is enrolled in good standing at the University and who has completed at least the sophomore year of study may apply. Generally, the maintenance allowance is adequate to cover living expenses while in training but does not cover transportation costs. Further information about these opportunities may be obtained from the College of Engineering.

### **Exchange Scholarships at Munich and Darmstadt, Germany**

The College of Engineering has exchange scholarships with the Technical University in Munich, Germany, and the Technische Hochschule Darmstadt in Darmstadt, Germany. Under the terms of the agreement, four University of Illinois students are given tuition scholarships at the Technical University in Munich and five are given scholarships at the Technische Hochschule Darmstadt. Stipends to cover living expenses for the year are included in the Munich program. Students selected by the Technical University in Munich and by the Technische Hochschule Darmstadt receive tuition scholarships at the University of Illinois at Urbana-Champaign. Equivalent cash stipends are awarded to the Munich students. Students are responsible for their own transportation expenses.

To be eligible for study at the Technical University in Munich, a student should be enrolled in one of the following curricula: civil engineering, electrical engineering, industrial engineering, mechanical engineering, metallurgical engineering, nuclear engineering, engineering physics. To be eligible for study at the Technische Hochschule Darmstadt, a student should be enrolled in one of the following curricula: civil engineering, chemical engineering, mechanical engineering, physics. It is expected that the full year's study abroad will be used toward graduation in the student's curriculum at Urbana-Champaign.

To participate in one of the programs, a student must have completed GER 104 or the equivalent (additional courses in German are recommended) and finished his or her sophomore studies in engineering at the Urbana-Champaign campus. In addition, the student must be an outstanding scholar who will be an excellent representative of the University of Illinois and must be a U.S. citizen.

The programs are under the general administration of the Engineering College Honors Council, although a recipient need not be an honors student if he or she has an outstanding undergraduate record.

### **French Educational Exchange Program**

College of Engineering students may participate in the French exchange programs at the following institutions: Institut National Polytechnique de Lorraine (INPL), Nancy; Ecole Nationale des Ponts et Chaussees, Paris; and Universite de Technologie de Compiègne, Compiègne. Each student should be a junior and should have credit for FR 104 or the equivalent, although additional courses in French are recommended. One- or two-semester programs are available, with tuition and certain academic-related expenses provided.

A new semester-long program began at INPL in January 1991. The program comprises French-language study, practical experience in research laboratories and industry, and technical course work.

## **Summer Exchange Program in China, the USSR, Argentina, and Brazil**

To introduce College of Engineering students to the cultures and languages of China, the Soviet Union, Argentina, and Brazil, programs were developed with different institutions in these countries. These opportunities are designed mainly to enable students to learn about the people of these countries during an eight-week period, to study the language, and to work in a limited way with technology. Two weeks are set aside for travel to interesting places. Credit-hour courses in the appropriate language are required before departing. Lodging, meals, and medical care are provided.

## **Other Study Abroad Exchange Programs**

Many exchange programs with educational institutions throughout the world are available for engineering students on this campus. The College of Engineering works closely with the Study Abroad Office in developing programs of study in which course credits can be transferred to this campus. The College of Engineering is planning programs with institutions in Japan (Kin Ki University) and other countries. Further information about these programs may be obtained from the College of Engineering.

## **HONORS PROGRAMS**

### **Honors at Graduation**

Honors awarded at graduation to superior students are designated on the diploma as honors, high honors, or highest honors. A student receives honors with a cumulative University of Illinois grade-point average of at least 4.5, and high honors with at least a 4.8 grade-point average at graduation ( $A = 5.0$ ). Highest honors may be awarded to any student eligible for high honors upon recommendation of his or her department. The criteria used by departments in selecting individuals for highest honors recognition include outstanding performance in course work and in supplementary activities of an academic or professional nature. Ordinarily, such a citation requires completion of an undergraduate thesis or a special project of superior quality.

### **Tau Beta Pi**

Tau Beta Pi is a national engineering honor society that recognizes students, alumni, and engineers for outstanding academic achievements and exemplary character. The Alpha chapter at the University of Illinois at Urbana-Champaign was founded in 1897 and is the fifth oldest chapter of Tau Beta Pi. In addition to gaining scholastic recognition, members participate in a range of activities that serve the chapter, the College of Engineering, and the community. The scholastic requirement for membership in Tau Beta Pi is that juniors must be in the upper one-eighth of their graduating class and seniors must be in the upper one-fifth of their graduating class.

### **Edmund J. James Scholars**

The honors program in engineering is part of the University's James Scholar program, which was established to recognize and develop the talents of academically outstanding students. Engineering students in this program are known as "James Scholars in Engineering." Each is assigned to an honors adviser and receives special consideration in the selection of a course program to meet specific needs. Students may apply for the program during summer advance enrollment or at the beginning of any semester.

A new freshman is eligible to enter the program if he or she meets two of the following three requirements: (1) rank in the top 10 percent of his or her high school graduating class; (2) ACT subscore in mathematics of 34 or better; (3) ACT composite score of 31 or better. To be eligible for admission and continuation in the James Scholar program in engineering, students other than new freshmen must have cumulative grade-point averages of 4.5 or better for juniors and seniors and 4.3 or better for sophomores. A transfer student with a superior transfer record may be accepted into the program on request after the completion of one normal semester in engineering with a grade-point average commensurate with the requirement for the student's class.

Good standing in the James Scholar program at graduation requires participation in special honors work for a majority of the semesters in which a student is in residence.

### **Dean's List**

See reference to the Dean's List on page 78.



## ELECTIVES

### Humanities and Social Sciences Electives

A total of 18 hours of humanities and social sciences is required (in addition to rhetoric), including one sequence in the humanities and one in the social sciences. The two sequences cannot be in the same department. A sequence is defined as any combination of at least 6 hours of approved courses (see list below\*) taught by a single nonengineering department or any of the interdisciplinary sequences listed below. Additional courses to complete the 18 hours must also be drawn from the lists of approved courses. All seminars (including 199), honors courses, thesis courses, and individual study are excluded except as specifically approved.

Students may obtain credit from different academic sources, i.e., residential instruction, College-Level Examination Program tests, advanced placement tests, and transfer credits. Credit in any specific subject may be used toward degree requirements only once. Because of the variety of sources available for social sciences and humanities electives, students may receive duplicate credit in specific courses, such as American history. Students should be aware that such duplication cannot be used toward degree requirements.

---

\*This list is current as of this printing. An updated list is available from advisers or from the Office of the Associate Dean for Undergraduate Studies.

---

### APPROVED COURSES IN THE HUMANITIES

AFRO 224, 253, 254, 259, 260, 368, 379

African studies—all courses except 222

ARCH 210, 310-316

Art and Design

ARTHI 101-250, 301-303, 310, 311, 322-365

ART&D 140

Asian studies—all courses except 265, 303, 337, 338, 347-350, 360, 362, 368, 369, 371, 383-388

Classical civilization—all courses except CLCIV 100, 101, 382

COMM 307, 308, 319

Comparative literature—all courses

Dance 340, 341

English—all courses except business and technical writing courses, rhetoric and composition courses, and

ENGL 302, 381, 385

Foreign languages—all foreign languages except English, the student's native language(s), and closely related languages. Course placement is based on the results of the student's language placement examination with the following limitations: (1) students may not repeat, for degree credit, courses more than two semesters below their high school achievement level (e.g., four years of high school language may allow credit for 103 and 104), and (2) students may earn proficiency credit for 103, 104, or higher by examination subject to the limits of rule (1).

Foreign literature in translation—all courses (check listing under appropriate language)

History—all courses except HIST 191-199, 290, 293, 296

Humanities—all courses except HUMAN 382

MATH 339

MUSIC 100-104, 110, 130-135, 202, 203, 213, 214, 310-319, 327, 333-337

Philosophy—all courses except PHIL 102, 103, 202, 353, 354

PHYCS 319

Religious studies—all courses

STS 201, 260

SPCOM 177, 178, 207, 210, 213, 254, 308, 315, 317, 319, 322, 332, 350, 387

THEAT 110, 263, 320, 336, 345, 346, 355, 361, 362, 371

### INTERDISCIPLINARY SEQUENCES IN THE HUMANITIES

ARTHI 111 and any of ARCH 310-312

ARTHI 112 and any of ARCH 313-316

MUSIC 132 and ARTHI 115

### APPROVED COURSES IN THE SOCIAL SCIENCES

AFR ST 222

AFRO 100, 161, 261, 327

AG EC 301, 318, 352-354

Anthropology—all courses except ANTH 143, 240, 246, 300, 307, 308, 318, 324, 337, 340-347, 351-356, 364, 365, 394

AS ST: 265, 303, 337, 338, 347-349, 360, 362, 368, 369, 371, 383-388

Communications—all courses except COMM 307, 308, 319

Economics—all courses except 171-173, 273, 371, 372, 374, 375

E P S 300-305, 310, 315, 385

ENG 298

ENVST 236, 344, 346

G E 220

Geography—all courses except GEOG 102, 185, 203, 205, 271-277, 304, 305, 307, 308, 315, 370-378

JOURN 214, 217-220, 231, 241, 251

Labor and industrial relations—all courses except L I R 347, 360

L A 214

LA ST 295

Linguistics—all courses except LING 191, 200, 202, 260, 301, 304, 305-307, 375, 376, 386, 388, 389

MIN E 302

Political science—all courses except POL S 270, 366, 390

PSYCH 100, 103, 105, 158, 201, 205, 216, 224, 238, 239, 248, 250, 318, 323-325, 337, 348, 349, 352-355, 357-360, 362, 365, 368, 371, 373

STS 150, 202

Sociology—all courses except SOC 185, 246, 332, 385-388

SPCOM 335

U P 101, 260, 301, 360

## INTERDISCIPLINARY SEQUENCES IN THE SOCIAL SCIENCES

ECON 102 or 103 and MIN E 302

ECON 102 or 103 and ENVST 236

## TECHNICAL ELECTIVES

Each engineering curriculum offers some elective opportunities, which may be specified as technical or nontechnical. All technical elective courses must be selected in accordance with departmental requirements.

Technical electives generally include 200- and 300-level courses in engineering, mathematics, and the natural sciences.

## Free Electives

These electives are selected at the prerogative of the student except as noted below.

Credit will not be allowed for courses of a remedial nature, such as mathematics below analytic geometry or basic military training. No more than 3 semester hours of physical education course work (basic level, i.e., activity courses) may be used as free electives nor may they be applied toward degree requirements. No more than 4 hours of religious foundation courses or 6 hours of advanced military science courses may be used as free electives.

Total transfer credit in required basic courses in mathematics (through integral calculus), physics, rhetoric, freshman chemistry, computer science, and engineering graphics may be used for free electives only if the credit covers topics beyond those in equivalent courses at the University of Illinois. Further restrictions on the acceptance of transfer credit for free electives may be imposed by the departments with the approval of the associate dean for undergraduate studies.

## Credit-No Credit Option

The credit-no credit grade option is available for students wanting to explore areas of academic interest that they might otherwise avoid for fear of poor grades. All students considering this option are cautioned that many graduate and professional schools consider applicants whose transcripts bear a significant number of nongrade symbols less favorably than those whose transcripts contain none or very few. Conditions under which students may take courses on a credit-no credit basis are outlined in the booklet *Code on Campus Affairs and Handbook of Policies and Regulations Applying to All Students*, which is distributed to all students.

## Curricula

### CURRICULUM IN AERONAUTICAL AND ASTRONAUTICAL ENGINEERING

#### For the Degree of Bachelor of Science in Aeronautical and Astronautical Engineering

This curriculum provides a strong fundamental background in engineering and applied science with emphasis on aircraft and space flight engineering. The program is designed to give the student a basic engineering education applicable to related engineering disciplines including graduate study. As many as 15 hours in free and technical electives can be used to provide a diversified program of study.

The curriculum requires 134 hours for graduation.



FIRST YEAR	
FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

SECOND YEAR	
FIRST SEMESTER	HOURS
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 225—Introductory Matrix Theory .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 150—Analytical Mechanics (Statics) .....	2
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

THIRD YEAR	
FIRST SEMESTER	HOURS
AAE 212—Aerodynamics I .....	4
AAE 224—Flight Structures I .....	4
AAE 254—Aerospace Dynamic Systems I .....	4
MATH 280—Advanced Calculus .....	3
Elective <sup>2</sup> .....	3
Total .....	18

FOURTH YEAR	
FIRST SEMESTER	HOURS
AAE 260—Aerospace Laboratory I .....	2
AAE 292—Seminar .....	1
Elective in social sciences or humanities <sup>1</sup> .....	3
Electives <sup>2</sup> .....	10
Total .....	16

FIRST YEAR	
SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
GE 103—Engineering Graphics .....	3
MATH 132—Calculus and Analytic Geometry II ...	3
PHYCS 106—General Physics (Mechanics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

SECOND YEAR	
SECOND SEMESTER	HOURS
MATH 285—Differential Equations and Orthogonal Functions .....	3
ME 205—Thermodynamics .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
TAM 212—Engineering Mechanics II (Dynamics) ..	3
Total .....	16

THIRD YEAR	
SECOND SEMESTER	HOURS
AAE 213—Aerodynamics II .....	4
AAE 225—Flight Structures II .....	4
AAE 233—Aircraft Propulsion .....	3
AAE 255—Aerospace Dynamic Systems II .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

FOURTH YEAR	
SECOND SEMESTER	HOURS
AAE 241—Aerospace Design .....	3
AAE 261—Aerospace Laboratory II .....	2
Electives <sup>2</sup> .....	11
Total .....	16

<sup>1</sup>Of the 134 hours required for graduation, 18 must be in social sciences and humanities. These requirements are discussed on pages 185 and 186.

<sup>2</sup>Elective credits totaling 24 hours are required for graduation. These electives must contain at least 6 hours from List A below and 3 hours from List B. In addition, credit is required in at least one 300-level aeronautical and astronautical engineering course. A total of 6 hours of electives are free electives. The remaining are technical electives.

A: ECE 229, 244, 260, 270, 340; PHYCS 331, 333  
B: MATSE 334 (MET E 334); PHYCS 383

CURRICULUM IN AGRICULTURAL ENGINEERING

For the Degree of Bachelor of Science in Agricultural Engineering

Agricultural engineering is the application of engineering principles to solutions of problems in agriculture. Efficient agricultural production and environmental protection depend on sophisticated systems of people, equipment, processes, and natural resources. Agricultural engineers are involved in the design of systems, which include mechanization of animal and crop production, soil moisture control, crop and food processing, materials handling, and structures for storage and shelter. Important design constraints are economics, conservation of materials and energy, safety, and environmental quality. Graduates are employed by industry and government in research, education, manufacturing, and applications. A five-year dual degree in engineering and agriculture is available (see pages 108, 111, and 112). By choice of electives, a student may direct his or her program toward specialization in power and machinery, soil and water, structures and environment, electric power and processing, or food engineering. Individual programs are checked by departmental advisers to ensure that Accreditation Board for Engineering and Technology requirements are met for any chosen specialization.

## Specialization in Power and Machinery, Soil and Water, Structures and Environment, or Electric Power and Processing

### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
AG E 100—Introduction to Agricultural Engineering, or ENG 100—Engineering Lecture .....	0-1
GE 103—Engineering Graphics .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Total .....	16-17

### SECOND YEAR

FIRST SEMESTER	HOURS
AG E 126—Engineering in Agriculture .....	4
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
CS 101—Introduction to Computers for Appli- cation to Engineering and Physical Science ...	3
TAM 150 or 152—Statics .....	2-3
Total .....	16-17

### THIRD YEAR

FIRST SEMESTER	HOURS
Agricultural engineering technical elective, Group I <sup>3</sup> .....	3
ECE 260 or 270—Circuit analysis .....	3-4
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>2</sup> .....	3
Biological and agricultural sciences elective <sup>1</sup> ...	3-4
Total .....	16-17

### FOURTH YEAR

FIRST SEMESTER	HOURS
Agricultural engineering technical elective, Group II <sup>3</sup> .....	3
Elective in social sciences or humanities <sup>2</sup> .....	6
Technical elective <sup>3</sup> .....	3-4
Biological and agricultural sciences elective <sup>1</sup> ....	3
Total .....	15-16

### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ...	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
Biological and agricultural sciences elective <sup>1</sup> ...	3-4
Total .....	16-17

### SECOND YEAR

SECOND SEMESTER	HOURS
AG E 127—Production Systems in Agriculture ...	3
MATH 285—Differential Equations and Orthogonal Functions .....	3
Elective in social sciences or humanities <sup>2</sup> .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 212—Engineering Mechanics II (Dynamics) ...	3
Total .....	16

### THIRD YEAR

SECOND SEMESTER	HOURS
Agricultural engineering technical elective, Group I <sup>3</sup> .....	3
AG E 298—Undergraduate Seminar .....	1
CE 261—Introduction to Structural Engineering or ME 220—Mechanics of Machinery .....	3
ME 209—Thermodynamics and Heat Transfer ...	3
TAM 235—Fluid Mechanics .....	4
Total .....	14

### FOURTH YEAR

SECOND SEMESTER	HOURS
Agricultural engineering technical elective, Group II <sup>3</sup> .....	3
AG E 299—Undergraduate Thesis .....	2
Biological and agricultural sciences elective <sup>1</sup> .....	3
Electives in social sciences or humanities <sup>2</sup> .....	6
Free elective .....	3
Total .....	17

Total hours for degree ..... 128

<sup>1</sup>Students must complete 12 to 15 hours from biological and agricultural sciences electives.

<sup>2</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

<sup>3</sup>Each student must have 18 to 20 hours of technical electives, selected from the following: (1) CE 261 or ME 220; (2) two courses from agricultural engineering technical electives, Group I, and two courses from Group II; and (3) additional courses from other technical electives.

## Biological and Agricultural Sciences Electives

The 12 to 15 hours of biological and agricultural sciences must be chosen as follows:

At least 8 hours from:

AGRON 121, 322, 326

AN S 307

BIOL 100, 101, 104



ENTOM 120  
 GEOL 101, 250  
 MCBIO 100  
 PLBIO 100  
 SOILS 101, 308  
 The remainder from:  
 AG EC 220, 324, 325  
 AG M 200, 201

## Specialization in Food Engineering

### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
AG E 100—Introduction to Agricultural Engineering, or ENG 100—Engineering Lecture .....	0-1
GE 103—Engineering Graphics .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Total .....	16-17

### SECOND YEAR

FIRST SEMESTER	HOURS
MCBIO 100—Introductory Microbiology .....	3
MCBIO 101—Introductory Experimental Microbiology .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
CHEM 131—Elementary Organic Chemistry .....	3
Elective in social sciences or humanities <sup>1</sup> .....	2
Total .....	17

### THIRD YEAR

FIRST SEMESTER	HOURS
CH E 261—Introduction to Chemical Engineering .....	3
FS 214—Survey of Food Chemistry .....	3
TAM 221—Elementary Mechanics of Solids .....	3
ECE 260—Introduction to Electric Circuits .....	3
Elective in social sciences or humanities <sup>1</sup> .....	4
Total .....	16

### FOURTH YEAR

FIRST SEMESTER	HOURS
CH E 371—Fluid Mechanics and Heat Transfer .	4
FS 301—Food Processing I .....	3
Agricultural engineering technical elective, Group I .....	3
AG E 311—Instrumentation and Measurements .	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ..	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
FS 101—Food in Modern Society, or free elective .....	3
Total .....	16

### SECOND YEAR

SECOND SEMESTER	HOURS
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 154—Analytical Mechanics .....	4
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
Elective in social sciences or humanities <sup>1</sup> .....	2
Total .....	16

### THIRD YEAR

SECOND SEMESTER	HOURS
CH E 370—Chemical Engineering Thermodynamics .....	3
AG E 298—Undergraduate Seminar .....	1
ME 220—Mechanics of Machinery .....	3
MCBIO 311—Food and Industrial Microbiology ..	3
MCBIO 312—Techniques of Applied Microbiology .....	2
Elective in social sciences or humanities <sup>1</sup> .....	4
Total .....	16

### FOURTH YEAR

SECOND SEMESTER	HOURS
CH E 373—Mass Transfer Operations .....	4
FS 302—Food Processing II .....	3
Agricultural engineering technical elective, Group II .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
AG E 299—Undergraduate Thesis .....	2
Total .....	15

Total hours for degree ..... 128

<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

## Agricultural Engineering Technical Electives

### GROUP I

AG E 236  
AG E 256  
AG E 287  
AG E 311  
AG E 340  
AG E 383

### GROUP II

AG E 277  
AG E 336  
AG E 346  
AG E 356  
AG E 357  
AG E 387

## Other Technical Electives

A student may choose any course that satisfies the college requirements for technical electives. A student desiring to specialize in a specific area of agricultural engineering may use the following lists as a guide in choosing technical electives.

### ELECTRIC POWER AND PROCESSING

AG E 236  
AG E 287  
AG E 311  
AG E 336  
AG E 340  
AG E 387  
CHEM 323  
ME 213  
ME 307

### POWER AND MACHINERY

AG E 236  
AG E 311  
AG E 336  
AG E 340  
AG E 346  
ME 270  
ME 231

### STRUCTURES AND ENVIRONMENT

AG E 277  
AG E 287  
AG E 311  
AG E 340  
AG E 387  
CE 214  
CE 262  
CE 263  
CE 264

### SOIL AND WATER

AG E 256  
AG E 277  
AG E 287  
AG E 311  
AG E 340  
AG E 356  
AG E 357  
CE 255  
CE 264  
CE 280

## CURRICULUM IN CERAMIC ENGINEERING

### For the Degree of Bachelor of Science in Ceramic Engineering

The program in ceramic engineering is administered by and is part of the Department of Materials Science and Engineering. An undergraduate degree program in materials science and engineering with specializations in polymers, metals, ceramics, and electronic materials is currently being developed.

Ceramic engineering is one of the principal fields dealing with materials—their properties, behavior, and applications. Some of the ceramic products originate with naturally occurring minerals; others require the synthesis of specific compounds to obtain the desired properties. Major industries such as electronics, steel, glass, aerospace, and construction depend heavily upon ceramic materials and their unique properties, especially at high temperatures. The ceramic engineering curriculum provides a strong background in engineering and applied science with emphasis on understanding material properties and processes. By choice of electives, a student may direct his or her program toward greater emphasis on electronics, bioengineering, glass, or high-temperature materials.

The curriculum requires 132 hours for graduation.



**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Total .....	16

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
MATSE 201 (CER E 201)—Ceramic Crystal Chemistry .....	3
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
MATSE 205 (CER E 205)—Phase Equilibria in Ceramic Systems .....	3
MATSE 314 (CER E 314)—Chemistry and Technology of Glass .....	3
Technical elective .....	2
MATSE 301—Thermodynamics of Materials <sup>2</sup> .....	4
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
ECE 260—Introduction to Electric Circuits or 270—Introduction to Circuit Analysis .....	3-4
Elective in social sciences or humanities <sup>1</sup> .....	3
Ceramic engineering electives <sup>2</sup> .....	6
MATSE 307 (CER E 307)—Thermal and Mechanical Properties of Ceramics .....	3
Total .....	15-16

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ..	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
MATSE 202 (CER E 202)—Ceramic Materials and Processes .....	3
MATH 280—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 154—Analytical Mechanics (Statics and Dynamics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
MATSE 208 (CER E 208)—Thermal Processing .....	3
MATSE 216 (CER E 216)—Rate Processes in Ceramic Engineering .....	3
Ceramic engineering elective <sup>2</sup> .....	3
Technical elective .....	3
Chemistry or physics elective <sup>2</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
Electrical applications elective <sup>2</sup> .....	3
Free electives .....	6
Ceramic engineering elective <sup>2</sup> .....	3
Technical elective .....	4
Total .....	16

<sup>1</sup>Consult the college list of approved courses beginning on page 185.<sup>2</sup>Consult department adviser for list of approved courses.**CURRICULUM IN CIVIL ENGINEERING****For the Degree of Bachelor of Science in Civil Engineering**

The civil engineering curriculum provides a strong foundation in the engineering sciences and their applications to the planning, design, and construction of bridges, buildings, dams, hydraulic structures, transportation facilities, environmental engineering systems, and many other civil engineering projects that enhance the quality of life. The flexibility of the civil engineering curriculum permits a student to pursue either a broad program representing most of the principal areas of civil engineering or a more specialized program in one or more technical specialty areas.

The curriculum requires 133 hours for graduation.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CHEM 101—General Chemistry .....	4
GE 103—Engineering Graphics .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
Elective in social sciences or humanities <sup>1</sup> .....	3
ENG 100—Engineering Lecture .....	0
Total .....	15

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 225—Introductory Matrix Theory .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 152—Engineering Mechanics I (Statics) .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
TAM 235—Fluid Mechanics .....	4
MATH 285—Differential Equations and Orthogonal Functions .....	3
Civil engineering core course <sup>3</sup> .....	4
Civil engineering core course <sup>3</sup> .....	3
Mathematics, basic sciences, or engineering sciences elective <sup>2</sup> .....	3
Total .....	17

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
Civil engineering core course <sup>3</sup> .....	3
Technical elective <sup>4</sup> .....	3
Technical elective <sup>4</sup> .....	3
B&TW 252—Technical Communication .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective <sup>5</sup> .....	3
CE 295—Professional Practice .....	0
Total .....	18

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CHEM 102—General Chemistry (Biological or Physical Version) .....	4
MATH 132—Calculus and Analytic Geometry II ...	3
RHET 105—Principles of Composition .....	4
PHYCS 106—General Physics (Mechanics) .....	4
CE 195—Introduction to Civil Engineering .....	0
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CE 292—Planning, Design, and Management of Civil Engineering Systems .....	3
CE 293—Engineering Modeling under Uncertainty .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 212—Engineering Mechanics II (Dynamics) .....	3
TAM 221—Elementary Mechanics of Solids .....	3
Total .....	16

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
Civil engineering core course <sup>3</sup> .....	3
Civil engineering core course <sup>3</sup> .....	3
Mathematics, basic sciences, or engineering sciences elective <sup>2</sup> .....	3
Technical elective <sup>4</sup> .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
Technical elective <sup>4</sup> .....	3
Technical elective <sup>4</sup> .....	3
Technical elective <sup>4</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free electives <sup>5</sup> .....	3
Total .....	15

<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

<sup>2</sup>Each student is required to select at least 6 hours of departmentally approved electives in mathematics, basic sciences, and engineering sciences (see the *Civil Engineering Undergraduate Student Handbook*).

<sup>3</sup>Each student's program must include at least five civil engineering core courses, totaling at least 15 hours selected from the departmentally approved list that follows.

<sup>4</sup>Technical electives must be selected in accord with departmental guidelines (see elaborating statement that follows).

<sup>5</sup>Subject to constraints imposed by the college (see page 185), each program may contain up to 6 hours of free electives.



Civil Engineering Core Courses

Five courses must be selected from among the courses contained in the following list for a total credit of 15 to 17 hours:

COURSE	HOURS
CE 201—Engineering Surveying .....	4
CE 210—Behavior of Materials .....	4
CE 216—Construction Engineering .....	3
CE 220—Materials for Transportation Facilities .....	3
CE 241—Air and Water Quality .....	3
CE 255—Introduction to Hydrosystems Engineering .....	3
CE 261—Introduction to Structural Engineering .....	3
CE 280—Introduction to Soil Mechanics and Foundation Engineering .....	3

TECHNICAL ELECTIVES

The sum of the semester hours of civil engineering core courses and technical electives must be at least 35. Technical electives must be selected from departmentally approved lists and be in accordance with guidelines established by the department in each of the following two categories:

Primary Area of Emphasis: At least 12 semester hours must be selected from among the courses offered in one of the technical specialty areas in which instruction is offered in this department (see the following listing).

Secondary Area of Emphasis: At least 6 semester hours must be selected from some technical area other than the student’s primary area of emphasis. The secondary emphasis area may be another technical specialty in civil engineering, but students are encouraged to broaden their basic interests and competences by selecting secondary areas that are outside of civil engineering but are related to and supportive of their areas of primary interests.

It is further required that the courses selected as technical electives, together with those chosen as civil engineering core courses, satisfy the following minimum engineering design content criteria:

- The cumulative engineering design content in each student’s program must be at least 16 semester hours, where the number of hours of design content in each civil engineering course are specified by the department in listings of course contents.
- Each student must complete at least one course that requires completion by the student of an integrated design project. The courses that meet this criteria are determined by the department faculty and are identified in the *Civil Engineering Undergraduate Student Handbook*.

Explicit guidelines for the selection of technical electives in each of these two categories, together with suggested courses in each of the available technical specialty areas in civil engineering, are published by the department in the *Civil Engineering Undergraduate Student Handbook*.

TECHNICAL EMPHASIS AREAS

Extensive programs of instruction are available in each of the following technical specialty areas:

- Construction Management
- Construction Materials
- Environmental Engineering
- General Civil Engineering
- Geotechnical Engineering
- Hydrosystems Engineering
- Photogrammetric and Geodetic Engineering
- Structural Engineering
- Transportation Engineering

PROGRAM REVIEW AND APPROVAL

Each student’s academic program is developed in close consultation with the student’s faculty adviser to be in compliance with the general requirements of this curriculum and in consonance with the elaborating guidelines of the department. To ensure that the individual academic programs thus developed do not abuse the substantial degree of electivity that is present in the curriculum, each student’s academic program must be reviewed and approved by a standing committee of the faculty before it is accepted as qualifying for the degree of B.S. in civil engineering.

## CURRICULUM IN COMPUTER ENGINEERING

### For the Degree of Bachelor of Science in Computer Engineering

The program in computer engineering is administered by and is part of the offerings of the Department of Electrical and Computer Engineering.

The following suggested curriculum indicates one way in which the student may satisfy the requirements for the degree of Bachelor of Science in computer engineering in eight semesters.

When registering in or graduating from this curriculum, a student must have a grade-point average of at least 3.0 in all electrical and computer engineering courses taken before such registration or graduation. To qualify for registration in the electrical and computer engineering courses specified in the first semester of the junior year of the curriculum in computer engineering, a student must have a combined grade-point average of 3.25 (A = 5.0) in the mathematics, physics, computer science, and electrical and computer engineering courses that are required in the freshman and sophomore years of the curriculum.

The curriculum requires 128 hours for graduation.

#### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
MATH 120—Calculus and Analytic Geometry I* ..	5
RHET 105—Principles of Composition .....	4
Electives <sup>1</sup> .....	3
Total .....	16

#### SECOND YEAR

FIRST SEMESTER	HOURS
CS 121—Introduction to Computer Science*.. <sup>2</sup> ..	4
MATH 213—Introduction to Discrete Mathematics* .....	3
MATH 242—Calculus of Several Variables* .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism)* .....	4
Electives <sup>1</sup> .....	2
Total .....	16

#### THIRD YEAR

FIRST SEMESTER	HOURS
ECE 229—Introduction to Electromagnetic Fields .....	3
ECE 249—Digital Systems Laboratory .....	2
ECE 291—On-Line Computing .....	3
ECE 340—Solid State Electronic Devices .....	3
ECE 309—Signal and System Analysis .....	3
Electives <sup>1</sup> .....	2
Total .....	16

#### FOURTH YEAR

FIRST SEMESTER	HOURS
Electives <sup>1</sup> .....	16

#### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II* .....	3
PHYCS 106—General Physics (Mechanics)* .....	4
Electives <sup>1</sup> .....	5
Total .....	16

#### SECOND YEAR

SECOND SEMESTER	HOURS
ECE 244—Electrical Engineering Laboratory I* ..	2
ECE 270—Introduction to Circuit Analysis* .....	4
ECE 290—Introduction to Computer Engineering* .....	3
MATH 285—Differential Equations and Orthogonal Functions* .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter)* .....	4
Total .....	16

#### THIRD YEAR

SECOND SEMESTER	HOURS
ECE 312—Computer Organization and Design ..	4
MATH 361—Introduction to Probability Theory I, or ECE 313—Probabilistic Methods of Signal and System Analysis .....	3
ECE 342—Electronic Circuits .....	3
CS 225—Data Structures .....	3
Electives <sup>1</sup> .....	3
Total .....	16

#### FOURTH YEAR

SECOND SEMESTER	HOURS
Electives <sup>1</sup> .....	16

<sup>1</sup>Electives totaling 47 hours are to be selected by the student in consultation with his or her adviser, apportioned as follows:

—23 hours of technical electives, including 15 hours chosen from a departmentally approved list of technical courses for the computer engineering program.

—18 hours of humanities and social sciences from the college-approved list. (See page 185.)

—6 hours of free electives, to be selected in accordance with the regulations of the college.

<sup>2</sup>The alternate for CS 121 is CS 101 and CS 122, with 7, instead of 8, hours of electives from other technical areas.

\*A 3.25 rule course.



CURRICULUM IN COMPUTER SCIENCE

For the Degree of Bachelor of Science in Computer Science

This curriculum is offered by the Department of Computer Science for students seeking a broad and deep knowledge of the theory, design, and application of digital computers and information processing techniques. The first two years are spent on basic work in mathematics, physics, and an introduction to the fundamental areas of computer science: computing, programming, the organization of digital machines, hardware, numerical analysis, artificial intelligence, and theory of computation. The third year completes the work in basic computer science and requires electives to broaden the background of the student. During the fourth year, the student is encouraged to deepen his or her understanding of topics of particular interest and ability.

To qualify for registration in the computer science courses specified in the first semester of the junior year, a student must have a combined grade-point average of 3.25 (A = 5.0) in the mathematics, physics, and computer science courses that are required in the freshman and sophomore years.

In order to graduate or continue in the computer science curriculum, a student must have a 3.0 technical grade-point average including the following courses:

- All computer science courses
- MATH 120, 132, and 242; or MATH 135 and 245
- MATH 225 or 315
- MATH 361/STAT 351 or MATH 363/STAT 310
- Any mathematics courses taken to satisfy the 300-level course requirements of the curriculum

Mathematics Requirements:	Hours
MATH 120, 132, and 242; or MATH 135 and 245 (calculus and analytic geometry) .....	10-11
MATH 225 or 315 (linear algebra) .....	2-3
MATH 361/STAT 351 or MATH 363/STAT 310 (probability or statistics) .....	3-4

The curriculum requires 122 hours for graduation.

FIRST YEAR	
FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
MATH 120—Calculus and Analytic Geometry I ...	5
Electives .....	6
Total .....	15

SECOND YEAR	
FIRST SEMESTER	HOURS
CS 121—Introduction to Computer Programming .....	4
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
Electives .....	5
Total .....	16

THIRD YEAR	
FIRST SEMESTER	HOURS
CS 231—Computer Architecture I .....	3
CS 257—Introduction to Numerical Analysis .....	3
Goal-directed sequence <sup>1</sup> .....	3
Other electives .....	7
Total .....	16

FOURTH YEAR	
FIRST SEMESTER	HOURS
Computer science electives .....	9
Goal-directed sequence <sup>1</sup> .....	3
Other electives .....	3
Total .....	15

FIRST YEAR	
SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ..	3
PHYCS 106—General Physics (Mechanics) .....	4
RHET 105—Principles of Composition .....	4
Total .....	15

SECOND YEAR	
SECOND SEMESTER	HOURS
CS 225—Data Structures .....	3
CS 273—Introduction to Theory of Computation .	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
Electives .....	3
Total .....	15

THIRD YEAR	
SECOND SEMESTER	HOURS
CS 232—Computer Architecture II .....	3
CS 281—Introduction to Computer Circuitry .....	3
MATH 361—Theory of Probability I .....	3
Goal-directed sequence <sup>1</sup> .....	3
Other electives .....	3
Total .....	15

FOURTH YEAR	
SECOND SEMESTER	HOURS
Computer science electives .....	9
Goal-directed sequence <sup>1</sup> .....	3
Other electives .....	3
Total .....	15

The computer science electives are chosen as follows:

At least six 300-level computer science courses must be selected, according to the following three rules:

1. Three courses must be selected, one from each of the following three groups:  
 Software—CS 323, 325  
 Architecture—CS 331, 333  
 Foundations—CS 373, 375
2. A fourth and fifth course must be selected from any two of the following three groups:  
 Numerical analysis—CS 358, 359  
 Hardware—CS 335, 363, 384, 389  
 Artificial intelligence—CS 348
3. A sixth course must be selected from any one of the six groups listed previously, or from the following additional courses. This sixth course must be selected so that there are two courses in one of the six groups; i.e., the sixth course must be from one of the five groups chosen to meet requirements 1 and 2.  
 Software—CS 311, 318, 326, 327, 328  
 Architecture—CS 337, 338, 362, 364  
 Foundations—MATH 314, 317; CS 376  
 Numerical analysis—CS 355; CS/MATH 383; MATH 285, 341, 370  
 Hardware—CS 339, 381  
 Artificial intelligence—CS 341, 342, 346, 347

Free Electives: A total of 10 to 12 semester hours is designated as free electives.

Honors: For graduation with highest honors, a student must complete a least 2 hours of CS 290—Individual Study and must obtain the favorable recommendation of the CS 290 instructor(s), in addition to satisfying all other requirements of the College of Engineering.

Humanities and social sciences: A total of 18 hours must be selected in the humanities and social sciences areas as specified by the college requirements.

---

<sup>1</sup>A sequence of courses directed toward the study of a specific problem area related to computer use. This sequence must be approved by the student's adviser.

## CURRICULUM IN ELECTRICAL ENGINEERING

### For the Degree of Bachelor of Science in Electrical Engineering

The following suggested curriculum is one way in which the student may satisfy, in eight semesters, all of the conditions below. Besides the 68 hours of specific, required courses, it lists certain electives as suggested courses for students who desire a moderate level of specialization. These electives may be replaced with other courses that satisfy the conditions below.

When registering in or graduating from this curriculum, a student must have a grade-point average of at least 3.0 ( $A = 5.0$ ) in all electrical and computer engineering courses taken before such registration or graduation. To qualify for registration in the electrical and computer engineering courses shown in the third (junior) year of the curriculum in electrical engineering, a student must have completed, with a combined grade-point average of 3.25, the mathematics, physics, computer science, and electrical and computer engineering courses that are shown in the first (freshman) and second (sophomore) years of the curriculum.

The curriculum requires 128 hours for graduation. The electrical engineering curriculum includes the following requirements:

- A. 68 hours of specific required courses
- B. 2 hours from two elective electrical and computer engineering laboratory courses (to be selected by the student in consultation with his or her adviser from the departmentally approved list).
- C. 13 hours of electrical and computer engineering electives (to be selected by the student in consultation with his or her adviser from the departmentally approved list).
- D. 21 hours of technical electives (to be selected by the student in consultation with his or her adviser from the departmentally approved list).
  - (1) At least 12 hours from areas outside electrical and computer engineering
  - (2) At least 10 hours from 300-level courses
  - (3) At least 9 hours from courses offered by the College of Engineering



- (4) At least one course from the departmentally approved list of engineering science electives outside of electrical and computer engineering
- (5) At least one course from the departmentally approved list of advanced mathematics courses
- E. 18 hours in the social sciences and humanities (to be selected by the student in consultation with his or her adviser from the college-approved list).
- F. 6 hours of free electives (to be selected by the student in consultation with his or her adviser in accordance with the regulations of the college)

Suggested Electrical Engineering Curriculum<sup>1</sup>

FIRST YEAR	
FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Elective in social sciences or humanities <sup>5</sup> .....	3
Total .....	16

SECOND YEAR	
FIRST SEMESTER	HOURS
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
SPCOM 101 <sup>6</sup> —Principles of Effective Speaking .	3
Elective in social sciences or humanities <sup>5</sup> .....	3
Total .....	16

THIRD YEAR	
FIRST SEMESTER	HOURS
ECE 229—Introduction to Electromagnetic Fields .....	3
ECE 309—Signal and System Analysis .....	3
ECE 340—Solid State Electronic Devices .....	3
MATH 280 <sup>4</sup> —Advanced Calculus .....	3
ME 209 <sup>4</sup> —Thermodynamics and Heat Transfer .	3
Total .....	15

FOURTH YEAR	
FIRST SEMESTER	HOURS
Electrical and computer engineering laboratory <sup>2</sup> .....	1
Electrical and computer engineering electives <sup>3</sup> ...	6
CS 257 <sup>4</sup> —Numerical Methods .....	3
PHYCS 383 <sup>4</sup> —Atomic Physics and Quantum Theory .....	3
Elective in social sciences or humanities <sup>5</sup> .....	3
Total .....	16

FIRST YEAR	
SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ...	3
PHYCS 106—General Physics (Mechanics) .....	4
RHET 133 <sup>6</sup> —Principles of Composition .....	3
Elective in social sciences or humanities <sup>5</sup> .....	3
Total .....	17

SECOND YEAR	
SECOND SEMESTER	HOURS
ECE 244—Electrical Engineering Laboratory I ....	2
ECE 270—Introduction to Circuit Analysis .....	4
ECE 290—Introduction to Computer Engineering .....	3
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
Total .....	16

THIRD YEAR	
SECOND SEMESTER	HOURS
ECE 342—Electronic Circuits .....	3
ECE 343—Electronic Circuits Laboratory .....	1
ECE 350—Lines, Fields and Waves .....	3
ECE 313 <sup>4</sup> —Probabilistic Methods of Signal and System Analysis .....	3
ECE 330 <sup>4</sup> —Electromechanics .....	3
MATH 315 <sup>4</sup> —Linear Transformations and Matrices .....	3
Total .....	16

FOURTH YEAR	
SECOND SEMESTER	HOURS
ECE 345—Senior Design Project Laboratory .....	2
Electrical and computer engineering laboratory <sup>2</sup> .....	1
Electrical and computer engineering electives <sup>3</sup> ...	7
Electives in social sciences or humanities <sup>5</sup> .....	6
Total .....	16

<sup>1</sup>All courses shown without superscript letters are required  
<sup>2</sup>Elective to be selected—see section B above  
<sup>3</sup>Elective to be selected—see section C above  
<sup>4</sup>Suggested technical elective—see section D above  
<sup>5</sup>Elective to be selected—see section E above  
<sup>6</sup>Suggested free elective—see section F above

## CURRICULUM IN ENGINEERING MECHANICS

### For the Degree of Bachelor of Science in Engineering Mechanics

This curriculum, offered by the Department of Theoretical and Applied Mechanics, is intended primarily for students pursuing careers in research and development in mechanical, civil, aerospace, and related engineering fields. The program also provides excellent preparation for graduate study in many different engineering disciplines.

Because of the diversity of modern research and development problems—especially in such newly emerging areas as energy development, materials engineering, space technology, and computer-based design—the curriculum is organized around a core that emphasizes a broad education covering the basic areas of science and engineering mechanics that are fundamental to all branches of engineering. In addition, six secondary field options—engineering science, experimental mechanics, computer applications, materials (metals), materials (polymers and composites), and biomechanics—allow the student to concentrate on areas of special interest. Any student with special educational goals may modify the curriculum by petition with the approval of the department and the College of Engineering.

The curriculum requires 128 hours for graduation.

#### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I .....	5
RHET 105—Principles of Composition .....	4
Total .....	16

#### SECOND YEAR

FIRST SEMESTER	HOURS
MATH 242—Calculus of Several Variables .....	3
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 152—Engineering Mechanics I (Statics) .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### THIRD YEAR

FIRST SEMESTER	HOURS
ECE 260—Introduction to Electric Circuits or ECE 270—Introduction to Circuit Analysis .....	3-4 <sup>3</sup>
TAM 224—Behavior of Materials .....	4
TAM 235—Fluid Mechanics .....	4
MATH 280 or 247—Advanced Calculus .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17-18

#### FOURTH YEAR

FIRST SEMESTER	HOURS
TAM 293—Research and Design Project .....	2
TAM 392—Design and Analysis in Engineering Practice .....	3
TAM 351—Fundamental Concepts of Deformable Body Mechanics .....	3
Secondary field elective .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective .....	2
Total .....	16

#### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II .....	3
PHYCS 106—General Physics (Mechanics) .....	4
MATH 225—Introductory Matrix Theory .....	2
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### SECOND YEAR

SECOND SEMESTER	HOURS
MATH 285 or 341—Differential Equations .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 212—Engineering Mechanics II (Dynamics) .....	3
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### THIRD YEAR

SECOND SEMESTER	HOURS
ME 205—Thermodynamics .....	3
Secondary field elective .....	3
Secondary field elective .....	2-3
Technical elective <sup>2</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective .....	0-1
Total .....	15

#### FOURTH YEAR

SECOND SEMESTER	HOURS
TAM 294—Research and Design Project .....	4
Secondary field elective .....	3
Secondary field elective .....	3
Technical elective <sup>2</sup> .....	3
Free elective .....	3
Total .....	16

<sup>1</sup>The list of courses approved by the College of Engineering should be consulted.

<sup>2</sup>The list of approved technical courses can be obtained in the departmental office.

<sup>3</sup>The extra hour of ECE 270 can be used as a technical or free elective.



## Secondary Field Options

The secondary field options consist of 14 or 15 hours of engineering and engineering-related courses, as indicated below for the six options. In the junior year, each student prepares a program of study in consultation with a faculty adviser. At least 0.5 hours of design and 7.5 hours of engineering science must be included in each program. The departmental office has a listing of the specific categories of each course. Substitutions for specific courses in an option can be made to meet the particular needs of a student. The program of study is then submitted to the chief adviser of the department for approval.

<b>EXPERIMENTAL MECHANICS</b>	<b>HOURS</b>
ME 261—Instrumentation, or CHEM 323—Applied Electronics .....	3-4
TAM 326—Experimental Stress Analysis .....	3
Theoretical and applied mechanics (any 300-level course) .....	6
Technical elective <sup>1</sup> .....	1-2

<b>COMPUTER APPLICATIONS</b>	<b>HOURS</b>
Electrical and computer engineering (any 300-level course), ME 261, or CHEM 323 .....	3
CS 257—Introduction to Numerical Analysis .....	3
CS 358—Numerical Analysis, or CS 360—Minicomputers .....	3
Computer science (any 300-level course), or ME 345—Finite Element Analysis .....	3
Theoretical and applied mechanics (any 300-level course) .....	3

<b>MATERIALS ENGINEERING (Metals)</b>	<b>HOURS</b>
Electrical and computer engineering (any 300-level course), ME 261, or CHEM 323 .....	3
TAM 324—Flow and Fracture of Solids .....	3
MATSE 302 (MET E 301), MATSE 316 (MET E 316), or MATSE 387 (MET E 387) (metallurgy) .....	3
ME 355 or TAM 327 (polymers) .....	3
Theoretical and applied mechanics (any 300-level course) .....	3

<b>MATERIALS ENGINEERING (Polymers and Composites)</b>	<b>HOURS</b>
Electrical and computer engineering (any 300-level course), ME 261, or CHEM 323 .....	3
TAM 324—Flow and Fracture of Solids .....	3
TAM 328—Mechanical Behavior of Composite Materials .....	3
TAM 327—Polymers .....	3
ME 355—Polymer Processing .....	3
CHEM 131—Elementary Organic Chemistry .....	3 <sup>2</sup>
MATSE 381—Polymer Characterization Laboratory .....	3 <sup>2</sup>
Additional course from polymer science and engineering option list .....	3 <sup>2</sup>

<b>BIOMECHANICS</b>	<b>HOURS</b>
Electrical and computer engineering (any 300-level course), ME 261, or CHEM 323 .....	3
CHEM 131—Elementary Organic Chemistry .....	3
PHYSL 301—General Physiology .....	3
PHYSL 303—General Physiology Laboratory .....	2
Additional college bioengineering biology core courses .....	3
Other college bioengineering biology core courses .....	1 or 2 <sup>3</sup>
Bioengineering or related courses .....	0-4 <sup>3</sup>

<b>ENGINEERING SCIENCE</b>	<b>HOURS</b>
Electrical and computer engineering (any 300-level course), ME 261, or CHEM 323 .....	3
Theoretical and applied mechanics (any 300-level course) .....	8
Mathematics (any 300-level course) .....	3

<sup>1</sup>The list of approved technical courses can be obtained in the departmental office.

<sup>2</sup>Required for the polymer science and engineering option in engineering but not for the materials engineering (polymers and composites) option in engineering mechanics.

<sup>3</sup>Required for the bioengineering option in engineering but not for the biomechanics option in engineering mechanics.

## CURRICULUM IN ENGINEERING PHYSICS\*

### For the Degree of Bachelor of Science in Engineering Physics

This curriculum provides broad, thorough training in fundamental physics and mathematics to prepare students for graduate study in physics and related fields and for research and development positions in industrial and governmental laboratories. For the first two years, the curriculum follows essentially the common engineering program. In the last two years, the emphasis is on advanced courses in physics and mathematics, but there is a liberal allowance of electives.

When registering for advanced undergraduate courses in physics, a student continuing in or transferring to this curriculum must have a grade-point average of 3.5 ( $A = 5.0$ ) in all University subjects exclusive of military science, physical education, and band, and a combined grade-point average of 3.5 in all courses in mathematics and physics taken before such registration. A transfer student must have a corresponding record in the institution from which he or she has transferred and must maintain such status at the University.

The illustrative program that follows shows the requirements to be completed in four years. However, many students take these courses in a different order. Students with adequate high school mathematics prerequisites should begin PHYCS 106 in the first semester. The program includes 36 hours of electives, 18 of which must be chosen from the college-approved list of humanities and social sciences electives (see page 185). The remaining 18 hours include 6 hours of free electives and 12 hours of technical or nontechnical electives, of which at least 6 hours must be nontechnical and at least 4 technical. For this curriculum, generally, technical electives are defined as courses within the areas of physics, mathematics, astronomy, chemistry, computer science, and engineering.

The curriculum requires 128 hours for graduation.

---

\*See also College of Liberal Arts and Sciences programs in physics (see page 283) and in sciences and letters major in physics (see page 302).

---

#### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry <sup>1</sup> .....	4
ENG 100—Engineering .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition, or	
RHET 108—Forms of Composition <sup>2</sup> .....	4
Total .....	16

#### SECOND YEAR

FIRST SEMESTER	HOURS
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity,	
and Magnetism) .....	4
PHYCS 210—Special Relativity .....	2
Elective(s) in social sciences or humanities <sup>4</sup> ....	3-6
CS 101—Introduction to Computers for	
Application to Engineering and Physical	
Science .....	3
Total .....	15-18

#### THIRD YEAR

FIRST SEMESTER	HOURS
MATH 280—Advanced Calculus .....	3
MATH 315—Linear Transformations and	
Matrices .....	3
PHYCS 332—Classical Mechanics .....	4
PHYCS 371—Light .....	4
Elective in social sciences or humanities <sup>4</sup> .....	3
Total .....	17

#### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry <sup>1</sup> .....	4
Elective in social sciences or humanities .....	3-6
MATH 132—Calculus and Analytic Geometry II ..	3
PHYCS 106—General Physics (Mechanics) .....	4
Total .....	14-17

#### SECOND YEAR

SECOND SEMESTER	HOURS
MATH 285—Differential Equations and	
Orthogonal Functions <sup>3</sup> .....	3
PHYCS 108—General Physics (Light, Sound, and	
the Structure of Matter) .....	4
PHYCS 331—Intermediate Electricity and	
Mechanics .....	5
Electives in social sciences or humanities <sup>4</sup> .....	3-6
Total .....	15-18

#### THIRD YEAR

SECOND SEMESTER	HOURS
PHYCS 333—Electromagnetic Fields .....	5
PHYCS 343—Electronic Circuits I <sup>6</sup> .....	5
PHYCS 386—Atomic Physics and Quantum	
Mechanics I <sup>7</sup> .....	4
Electives <sup>4,5</sup> .....	2-4
Total .....	16-18



FOURTH YEAR FIRST SEMESTER	HOURS
PHYCS 303—Modern Experimental Physics, or PHYCS 344—Electronic Circuits II .....	5
PHYCS 361—Thermodynamics and Statistical Mechanics .....	4
PHYCS 387—Atomic Physics and Quantum Mechanics II .....	4
Electives <sup>4,5</sup> .....	3-6
Total .....	16-19

FOURTH YEAR SECOND SEMESTER	HOURS
Electives <sup>4,5</sup> .....	14-18

<sup>1</sup>CHEM 107, 109, and 108, 110 may be substituted for CHEM 101 and 102 by students who desire a more rigorous chemistry sequence.

<sup>2</sup>SPCOM 111 and 112 fulfill the graduation requirement in rhetoric. The extra 2 hours may be applied to nontechnical electives or to free electives.

<sup>3</sup>MATH 341 and 342 may replace MATH 285. Extra hours count as technical electives.

<sup>4</sup>See paragraph above on elective distribution and definition. Each student must complete 18 hours from the college-approved list of social sciences and humanities electives (see page 185).

<sup>5</sup>Among technical electives, the following mathematics and physics courses are valuable: MATH 346—Complex Variables, MATH 257—Numerical Methods, PHYCS 397—Individual Study Project, PHYCS 365—Plasma Physics, PHYCS 382—Subatomic Physics, PHYCS 389—Solid State Physics.

<sup>6</sup>Students wishing to emphasize electrical engineering may take ECE 342 or other suitable electrical engineering selections.

<sup>7</sup>It is required that MATH 315—Linear Transformations and Matrices be taken before or concurrently with PHYCS 386.

Applied Physics Options

In consultation with his or her adviser, a student may elect an applied physics option. These options involve subjects related to physics that are of an applied nature and allow the student to focus on a specialized area. A student must register for an option in the physics undergraduate records office, where a list of approved courses is available. Planning for the option should begin during the sophomore year. Courses in these options may be taken under the various elective categories, or they may be substituted for certain advanced physics courses approved by the adviser. The college requirement of 18 hours of social sciences and humanities must be met. The options are as follows:

- Applied Nuclear Physics
- Bioengineering (see page 178)
- Fluids and Plasmas
- Optical Physics and Lasers
- Physical Electronics
- Systems Analysis and Control Theory

CURRICULUM IN GENERAL ENGINEERING

For the Degree of Bachelor of Science in General Engineering

The general engineering curriculum provides a comprehensive program in the basic sciences, engineering sciences, and project design, together with specialized training in an approved secondary field. The secondary field may be selected from the areas shown below or from any other cohesive field of study approved by the department. Other fields selected in the past include mathematics, bioengineering, oceanography, meteorology, and technical writing. The program is centered around a strong core in mathematics, theoretical and applied mechanics, basic electronics, thermodynamics, and interdisciplinary design.

The curriculum requires 127 hours for graduation.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics and Design .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	15

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 150—Analytical Mechanics (Statics) .....	2
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	15

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
GE 221—Introduction to General Engineering Design .....	3
GE 222—Simulation and Analysis of Dynamic Systems .....	3
GE 288—Economic Analysis for Engineering Decision Making .....	3
ECE 260—Introduction to Electric Circuits .....	3
Secondary field elective .....	3
Total .....	15

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
GE 241—Component Design .....	4
GE 292—Engineering Law .....	3
TAM 235—Fluid Mechanics .....	4
Secondary field elective .....	3
Free elective .....	3
Total .....	17

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
MATH 132—Calculus and Analytic Geometry II ..	3
PHYCS 106—General Physics (Mechanics) .....	4
RHET 105—Principles of Composition .....	4
MATH 225—Introductory Matrix Theory .....	2
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 212—Engineering Mechanics II (Dynamics) .....	3
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
ECE 244—Electrical Engineering Laboratory I ....	2
GE 232—Engineering Design Analysis .....	4
GE 234—General Engineering Laboratory .....	3
ME 205—Thermodynamics .....	3
Secondary field elective .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	18

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
GE 242—Project Design .....	3
GE 291—General Engineering Seminar .....	0
Technical elective .....	3
Secondary field elective .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective .....	3
Total .....	15

<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

**Suggested Fields of Concentration**

<b>ENGINEERING ADMINISTRATION</b>	<b>HOURS</b>
ACCY 200—Fundamentals of Accounting .....	3
B ADM 210—Management and Organizational Behavior .....	3
B ADM 314—Production .....	3
B ADM 315—Management in Manufacturing .....	3
B ADM 321—Individual Behavior in Organizations .....	3
B ADM 323—Organizational Design and Environment .....	3
B ADM 351—Personnel Administration .....	3
FIN 254—An Introduction to Business Financial Management .....	3
GE 334—Introduction to Reliability Engineering .....	3
GE 392—Legal Problems in Engineering Design .....	3
IE 238—Analysis of Data .....	3
IE 335—Industrial Quality Control .....	3
IE 373—Production Planning and Control .....	3
IE 386—Operations Research II .....	3-4
B&TW 251—Business and Administrative Communication .....	3
B&TW 252—Technical Communication .....	3



**ENGINEERING MARKETING****HOURS**

ACCY 200—Fundamentals of Accounting .....	3
B ADM 202—Principles of Marketing .....	3
B ADM 320—Marketing Research .....	3
B ADM 337—Promotion Management .....	3
B ADM 344—Buyer Behavior .....	3
B ADM 360—Marketing to Business and Government .....	3
GE 392—Legal Problems in Engineering Design .....	3
IE 238—Analysis of Data .....	3
PSYCH 245—Industrial Organizational Psychology .....	3
B&TW 251—Business and Administrative Communication .....	3
B&TW 252—Technical Communication .....	3

**ENVIRONMENTAL QUALITY****HOURS**

CE 241—Air and Water Quality .....	3
CE 340—Physical Principles of Environmental Engineering Processes .....	3
CE 341—Regional Environment Management Simulation .....	2
CE 342—Water Quality Control Processes .....	3
CE 343—Chemical Principles of Environmental Engineering Processes .....	3-4
CE 344—Solid Waste Management .....	4
CE 345—Atmospheric Dispersion Modeling .....	3
CE 346—Biological Principles of Environmental Engineering Processes .....	3
CE 347—Stream Ecology .....	3
CE 349—Air Resources Engineering .....	3
ME 303—Applied Combustion .....	3
ENVST 331—Toxic Substances in the Environment .....	2

**COMPUTER SCIENCE****HOURS**

Any computer science course beyond CS 101.

**MINING AND GEOLOGICAL ENGINEERING**

CE 201—Engineering Surveying <sup>1</sup> .....	4
CE 280—Introduction to Soil Mechanics and Foundation Engineering .....	3
CE 284—Geotechnical Engineering .....	3
CE 383—Soil Mechanics and Soil Properties .....	4
CE 384—Applied Soil Mechanics .....	4
GEOL 107—General Geology I <sup>1</sup> .....	4
GEOL 108—General Geology II <sup>1</sup> .....	4
GEOL 250—Geology for Engineers .....	3
GEOL 311—Structural Geology .....	4
GEOL 321—Principles of Stratigraphy .....	4
GEOL 332—Mineralogy-Petrology .....	4
IE 238—Analysis of Data .....	3
IE 357—Safety Engineering .....	3
MATH 280—Advanced Calculus .....	3
Any mining engineering course .....	1-4

**CONTROL SYSTEMS****HOURS**

CS 221—Machine-Level Programming .....	3
CS 225—Data Structures .....	3
ECE 386—Control Systems .....	4
ECE 390—Introduction to Optimization .....	3
GE 324—Digital Control of Dynamic Systems .....	3
MATH 361—Introduction to Probability Theory I .....	3
ME 312—Modern Control Theory .....	4
ME 313—Computer Control of Mechanical Engineering Systems .....	3
ME 388—Industrial Control Systems .....	3

**ROBOTICS****HOURS**

CS 346—Pattern Recognition and Machine Learning .....	3
CS 347—Knowledge-Based Programming .....	3
CS 375—Automata, Formal Languages, and Computational Complexity .....	3
ECE 291—On-Line Computing .....	3
ECE 348—Introduction to Artificial Intelligence .....	3
ECE 375—Modeling of Bio-Systems .....	3-4
ECE 390—Introduction to Optimization .....	3
GE 293—Robotics Laboratory .....	3
GE 324—Digital Control of Dynamic Systems .....	3
GE 334—Introduction to Reliability Engineering .....	3

GE 389—Robot Dynamics and Control .....	3
ME 285—Analysis of Manufacturing Processes .....	3
ME 313—Computer Control of Mechanical Engineering Systems .....	3
ME 342—Kinematic Analysis and Synthesis .....	4
ME 343—Dynamics of Machinery .....	3
ME 375—Introduction to Bionics .....	3

<sup>1</sup>These courses are required in the mining engineering option. These hours will count as the secondary field, and 6 additional hours will be substituted for other courses with the approval of the adviser.

CURRICULUM IN INDUSTRIAL ENGINEERING

For the Degree of Bachelor of Science in Industrial Engineering

Industrial engineering is concerned with the design, improvement, and installation of integrated systems of men, materials, and equipment, drawing upon specialized knowledge and skill in the mathematical, physical, and social sciences together with the principles and methods of engineering analysis and design, to specify, predict, and evaluate the results to be obtained from such systems. Industrial engineers are in demand by a wide variety of industries ranging from metalworking through electrical, chemical, pharmaceutical, and food processing.

The curriculum requires 130 hours for graduation.

FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Total .....	16

SECOND YEAR

FIRST SEMESTER	HOURS
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 154—Analytical Mechanics (Statics and Dynamics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

THIRD YEAR

FIRST SEMESTER	HOURS
IE 238—Analysis of Data .....	3
IE 248/PSYCH 258—Human Factors in Human-Machine Systems .....	3
IE 385—Operations Research I .....	3
ME 231—Processing and Structure of Materials .	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

FOURTH YEAR

FIRST SEMESTER	HOURS
IE 335—Industrial Quality Control .....	3
IE 363—Facilities Planning and Design .....	3
IE 373—Production Planning and Control .....	3
Technical elective <sup>2</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective .....	3
Total .....	18

FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ..	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

SECOND YEAR

SECOND SEMESTER	HOURS
MATH 285—Differential Equations and Orthogonal Functions .....	3
ME 209—Thermodynamics and Heat Transfer ...	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

THIRD YEAR

SECOND SEMESTER	HOURS
ECE 270—Introduction to Circuit Analysis .....	4
IE 203—Engineering Economics .....	3
IE 232—Methods-Time Analysis .....	3
IE 291—Seminar .....	0
IE 386—Operations Research II .....	3
ME 285—Analysis of Manufacturing Processes ..	3
Total .....	16

FOURTH YEAR

SECOND SEMESTER	HOURS
IE 370—Industrial Engineering Design Laboratory .....	3
Technical elective <sup>2</sup> .....	6
Elective in social sciences or humanities <sup>1</sup> .....	3
Free elective .....	3
Total .....	15



<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

<sup>2</sup>A total of 9 hours of technical electives from a departmentally approved list is required. A limit of 6 hours of this total can be for undergraduate individual instruction courses.

## CURRICULUM IN MECHANICAL ENGINEERING

### For the Degree of Bachelor of Science in Mechanical Engineering

Mechanical engineering is concerned with the theory of conversion and transmission of energy and the practical use of power processes; the kinematic, dynamic, and strength and wear considerations as well as the technological and economic aspects in the development, design, and use of machines and processes; the analysis, synthesis, and control of entire engineering systems; and the organizational and management problems confronting the mechanical engineer.

The curriculum requires 130 hours for graduation.

#### FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
MATH 120—Calculus and Analytic Geometry I ..	5
RHET 105—Principles of Composition .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### SECOND YEAR

FIRST SEMESTER	HOURS
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
MATH 225—Introductory Matrix Theory .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 154—Analytical Mechanics (Statics and Dynamics) .....	4
Total .....	16

#### THIRD YEAR

FIRST SEMESTER	HOURS
ME 205—Thermodynamics .....	3
ME 211—Introductory Gas Dynamics .....	3
ME 220—Mechanics of Machinery .....	3
ME 240—Modeling and Analysis of Dynamic Systems .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### FOURTH YEAR

FIRST SEMESTER	HOURS
ME 232—Behavior of Materials in Service .....	2
ME 250—Thermal Science Laboratory <sup>3</sup> .....	3
ME 285—Analysis of Manufacturing Processes ..	3
ME 304—Energy Conversion Systems .....	3
Technical elective .....	2
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	16

#### FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
GE 103—Engineering Graphics I .....	3
MATH 132—Calculus and Analytic Geometry II ..	3
PHYCS 106—General Physics (Mechanics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

#### SECOND YEAR

SECOND SEMESTER	HOURS
ECE 270—Introduction to Circuit Analysis .....	4
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 221—Elementary Mechanics of Solids .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

#### THIRD YEAR

SECOND SEMESTER	HOURS
ME 213—Heat Transfer .....	3
ME 231—Processing and Structure of Materials ..	4
ME 261—Introduction to Instrumentation, Measurement, and Control Fundamentals <sup>3</sup> ....	3
ME 270—Analysis and Design of Machines .....	4
ME 291—Seminar .....	0
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	17

#### FOURTH YEAR

SECOND SEMESTER	HOURS
ME 280—Senior Mechanical Engineering Design .....	3
Technical electives <sup>2</sup> .....	6
Free electives <sup>2</sup> .....	6
Total .....	15

<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

<sup>2</sup>A total of 8 hours of technical electives is required and must be chosen from a departmentally approved list.

<sup>3</sup>ME 250 and 280 can be alternated, with ME 280 taken first and followed by ME 250.

CURRICULUM IN METALLURGICAL ENGINEERING

For the Degree of Bachelor of Science in Metallurgical Engineering

The program in metallurgical engineering is administered by and is part of the Department of Materials Science and Engineering. An undergraduate degree program in materials science and engineering with specializations in polymers, metals, ceramics, and electronic materials is currently being developed.

The program in metallurgical engineering emphasizes physical metallurgy but encourages the student, by appropriate selection of elective courses, to understand other types of materials—polymers, ceramics, and electronic materials. The basic core of physical metallurgical principles is treated in the MATSE 370-373 (MET E 370-373) sequence, and this may be taken by students from other curricula who wish to obtain a strong foundation in the principles of physical metallurgy.

The curriculum requires 128 hours for graduation.

NOTE: CER E 245 and MET E 314 have been replaced by MATSE 301.

FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
Total .....	16

SECOND YEAR

FIRST SEMESTER	HOURS
MATH 225—Introductory Matrix Theory .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
TAM 154—Analytical Mechanics (Statics and Dynamics) .....	4
Elective <sup>1</sup> .....	3
Total .....	16

THIRD YEAR

FIRST SEMESTER	HOURS
MATSE 370 (MET E 370)—Physical Metallurgy .....	3
MATSE 371 (MET E 371)—Physical Metallurgy Laboratory I .....	3
MATSE 319 (MET E 310)—Crystallography and Diffraction .....	4
MATSE 301—Thermodynamics of Materials .....	4
Elective <sup>1</sup> .....	3
Total .....	17

FOURTH YEAR

FIRST SEMESTER	HOURS
ECE 260—Introduction to Electric Circuits or 270—Introduction to Circuit Analysis .....	3-4
MATSE 296 (MET E 296)—Metallurgical Seminar .....	2
MATSE 316 (MET E 316)—Mechanical Metallurgy .....	3
MATSE 318 (MET E 318)—Physics of Metals .....	3
Electives <sup>1</sup> .....	6
Total .....	17-18

FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ...	3
PHYCS 106—General Physics (Mechanics) .....	4
Elective in social sciences or humanities <sup>1</sup> .....	4
Total .....	15

SECOND YEAR

SECOND SEMESTER	HOURS
MATH 285—Differential Equations and Orthogonal Functions .....	3
PHYCS 108—General Physics (Light, Sound, and the Structure of Matter) .....	4
TAM 221—Elementary Mechanics of Solids .....	3
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
Elective <sup>1</sup> .....	3
Total .....	16

THIRD YEAR

SECOND SEMESTER	HOURS
MATSE 372 (MET E 372)—Physical Metallurgy .....	3
MATSE 373 (MET E 373)—Physical Metallurgy Laboratory II .....	3
Electives <sup>1</sup> .....	10
Total .....	16

FOURTH YEAR

SECOND SEMESTER	HOURS
Electives <sup>1</sup> .....	14-15



<sup>1</sup>All students are required to satisfy the college requirement of 18 hours in the social sciences and humanities (page 185). Electives totaling 6 hours are free to be selected by the student. A minimum of 9 hours is to be selected from among these departmental electives: MET E 299, MATSE 302 (MET E 301), MATSE 308 (MET E 307), MATSE 321 (MET E 312), MATSE 317 (MET E 317), MATSE 380, MATSE 381, MATSE 395. A minimum of 5 hours of technical electives are to be taken outside the department. A liberal interpretation of technical elective will be taken and may include courses that satisfy a carefully considered career plan presented by the student to his or her adviser.

CURRICULUM IN NUCLEAR ENGINEERING

For the Degree of Bachelor of Science in Nuclear Engineering

The curriculum in nuclear engineering provides students with comprehensive study in basic sciences, basic engineering, the social sciences and humanities, and technical areas specific to nuclear engineering. It also provides a large, flexible selection of both technical and free electives, which enables the student to emphasize breadth or depth of study or both. Thus, the curriculum prepares its graduates not only to enter directly into a wide variety of careers in nuclear engineering but also to continue formal education at the graduate level.

Nuclear engineering is a branch of engineering primarily related to the development and use of nuclear energy sources, including (1) the continued application of fission reactors as central electric power plant thermal sources; (2) the longer term development of fusion reactors for electric power generation; and (3) the use of radiation sources in such areas as materials, biological systems, medical treatment, radiation instrumentation, and activation analysis.

The curriculum during the first two years provides a strong foundation in basic sciences (physics, mathematics, and chemistry) and an introduction to basic electric circuits and to digital computer use. Taking these courses during this time in the program provides the student added flexibility in choosing technical elective courses.

The curriculum requires 127 hours for graduation.

FIRST YEAR

FIRST SEMESTER	HOURS
CHEM 101—General Chemistry .....	4
ENG 100—Engineering Lecture .....	0
GE 103—Engineering Graphics I .....	3
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105—Principles of Composition .....	4
NUC E 290F—Nuclear Engineering Freshman Orientation .....	1
Total .....	17

SECOND YEAR

FIRST SEMESTER	HOURS
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics .....	4
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> , free elective <sup>3,4</sup> , or elective in nuclear engineering <sup>5</sup> .....	2-3
Total .....	15-16

THIRD YEAR

FIRST SEMESTER	HOURS
ME 211—Introductory Gas Dynamics .....	3
NUC E 346—Modern Physics for Nuclear Engineers .....	3
TAM 221—Elementary Mechanics of Solids .....	3
Advanced mathematics <sup>6</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
Total .....	15

FIRST YEAR

SECOND SEMESTER	HOURS
CHEM 102—General Chemistry .....	4
MATH 132—Calculus and Analytic Geometry II ...	3
MATH 225—Introductory Matrix Theory .....	2
PHYCS 106—General Physics .....	4
Elective in social sciences or humanities <sup>1</sup> .....	2
Total .....	15

SECOND YEAR

SECOND SEMESTER	HOURS
PHYCS 108—General Physics .....	4
MATH 285—Differential Equations and Orthogonal Functions .....	3
TAM 154—Statics and Dynamics .....	4
ME 205—Thermodynamics .....	3
Elective in social sciences or humanities <sup>1</sup> , free elective <sup>3</sup> , or elective in nuclear engineering <sup>5</sup> .....	2-3
Total .....	16-17

THIRD YEAR

SECOND SEMESTER	HOURS
NUC E 347—Introduction to Nuclear Engineering .....	4
Technical electives <sup>7</sup> .....	3
Elective in social sciences or humanities <sup>1</sup> .....	3
NUC E 351—Nuclear Engineering Laboratory ....	3
ECE 270—Introduction to Circuit Analysis .....	4
Total .....	17

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
Nuclear engineering elective <sup>5</sup> .....	3
Technical electives <sup>7</sup> .....	6
NUC E 352—Advanced Nuclear Engineering Laboratory .....	1
NUC E 358—Design in Nuclear Engineering .....	3
Elective in social sciences or humanities <sup>1</sup> or free elective <sup>4</sup> .....	3
Total .....	16

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
Nuclear engineering elective <sup>5</sup> .....	3
Technical electives <sup>7</sup> .....	6
Elective in social sciences or humanities <sup>1</sup> , or free elective <sup>3</sup> .....	6
Total .....	15

<sup>1</sup>Each student is required to select 18 hours, including ECON 102 or 103, from the college-approved list of social sciences and humanities electives (see page 185).

<sup>2</sup>This is a required course in the freshman year.

<sup>3</sup>A total of 6 hours of electives are free to be selected by the student.

<sup>4</sup>Consideration should be given to NUC E 101—Introduction to Energy Sources as a free elective in the freshman or sophomore year.

<sup>5</sup>A student is required to take a minimum of 9 hours selected from the following nuclear engineering electives (at least 6 hours are to be at the 300 level): NUC E 197—Nuclear Energy and Its Uses (1 hour); NUC E 241—Introduction to Radiation Protection (2 hours); NUC E 243—Radiation Protection Laboratory (1 hour); NUC E 290—Special Topics (1 to 4 hours); NUC E 295—Special Problems (1 to 4 hours); NUC E 312—Nuclear Power Economics and Fuel Management (3 hours); NUC E 321—Introduction to Controlled Thermonuclear Fusion (4 hours); NUC E 331—Material Science in Nuclear Engineering (3 hours); NUC E 341—Nuclear Radiation Protection (3 hours); NUC E 342—Radioactive Waste Management (2 hours); NUC E 352—Advanced Nuclear Engineering Laboratory (1 to 3 hours); NUC E 355—Reactor Statics and Dynamics (3 hours); NUC E 357—Nuclear Reactor Safeguards (3 hours); NUC E 388—Nuclear Ceramics (3 hours); and NUC E 390—Intermediate Special Topics (1 to 4 hours).

<sup>6</sup>Students are required to take a minimum of one 3-hour mathematics course at the 300 level in addition to MATH 285.

<sup>7</sup>A student is required to select 15 hours of technical electives, as specified in the college-approved list on page 185.

NOTE: Students are required to have a specific area of specialization. This is accomplished by careful selection of technical electives and nuclear engineering electives to provide a minimum of three courses in the specialized area of study. Examples of such areas are power, materials, radiation protection, biological effects of radiation, thermal-hydraulics, fusion, and plasma engineering. A student who has selected an area of specialization may elect to substitute a more appropriate course for one specified as required in the above listing in order to begin a sequence. A course substitute must have as high a caliber and content as that being replaced.



# College of Fine and Applied Arts

116 Architecture Building, 608 East Lorado Taft Drive, Champaign, IL 61801

Krannert Art Museum and Kinkead Pavilion .....	209
Krannert Center for the Performing Arts .....	210
University Music Performance Organizations .....	210
Libraries .....	210
Departments and Curricula .....	210
Special Programs .....	210
Honors Program .....	211
Graduation Requirements .....	211
General Education Requirements .....	211
Electives and General Education Sequence Requirements .....	211
Specific Elective Courses .....	214
School of Architecture .....	214
School of Art and Design .....	216
Department of Dance .....	224
Department of Landscape Architecture .....	226
School of Music .....	227
Department of Theatre .....	234
Department of Urban and Regional Planning .....	237

The College of Fine and Applied Arts prepares men and women for professional work by offering programs in architecture, art and design, dance, landscape architecture, music, theatre, and urban and regional planning. Both freshmen and transfer students are admitted to these curricula. In each curriculum certain basic courses, professional courses, and general education requirements, including a minimum approved sequence of 6 semester hours each in the humanities, social sciences, and natural sciences, must be completed in order to qualify for the specific baccalaureate degree offered.

For development beyond the undergraduate programs in these areas of study, the departments of the college offer graduate curricula leading to advanced professional degrees through the Graduate College.

For students enrolled in other colleges and schools of the University of Illinois at Urbana-Champaign, the College of Fine and Applied Arts offers introductory courses designed to increase aesthetic appreciation and development and to portray the role of the arts in civilization. Participation in the many bands, choruses, and orchestras on campus, as well as private instruction on most instruments and in voice, is available to students in all colleges by audition.

To serve the total academic community and all citizens in the state of Illinois, the college features the arts in exhibitions, concerts, lectures, performances, demonstrations, and conferences within the areas of architecture, art, dance, landscape architecture, music, theatre, and urban and regional planning. Many outstanding professionals and works in these fields are brought to the University campus.

In addition to the teaching divisions, the College of Fine and Applied Arts includes the Krannert Center for the Performing Arts, the Krannert Art Museum and Kinkead Pavilion, and the Small Homes Council—Building Research Council.

## KRANNERT ART MUSEUM AND KINKEAD PAVILION

The museum exhibits art objects from its extensive collections, which date from ancient Egypt to our own time. In addition, it schedules a full program of changing exhibitions. These bring to the campus a wide variety of historic and contemporary works of art.

## **KRANNERT CENTER FOR THE PERFORMING ARTS**

The Krannert Center for the Performing Arts, which opened in 1969, is a remarkable four-theatre performing arts complex with spaces for instruction, rehearsal, and performance in theatre, opera, dance, and music. The Foellinger Great Hall, seating 2,200, is designed for large-scale musical events. The Festival Theatre, with 1,000 seats, is for opera, dance, and other musical stage productions. The Colwell Playhouse seats 700 and is the home of the Illinois Repertory Theatre. The Studio Theatre, seating 150, is for experimental productions. An outdoor amphitheater, rehearsal rooms, offices, dressing rooms, technical shops, and underground parking on two levels for 650 cars complete this monumental facility. The major donors of the center were Mr. and Mrs. Herman C. Krannert of Indianapolis.

## **UNIVERSITY MUSIC PERFORMANCE ORGANIZATIONS**

The School of Music offers credit for all students enrolled in its many performance organizations. These organizations include ensembles in the nationally recognized Department of Bands: Wind Ensemble, two Symphonic Bands, three Concert Bands, Basketball Band, Brass Band, Clarinet Choir, and the world-famous Marching Illini.

The Choral Division offers singers the opportunity to perform in the Oratorio Society, Black Chorus, Women's Chorus, University Chorus, Men's and Women's Glee Clubs, Concert Choir, and UI Chorale. The University Symphony and Illini Symphony, four jazz bands, a Javanese gamelan, the Russian Folk Orchestra, and ensembles specializing in contemporary music, chamber music, harp, and early music, among others, satisfy student interest both as performers and concertgoers.

A student in any college wishing to enroll in a performance organization should contact the School of Music or the appropriate ensemble director to receive further information and arrange for an audition.

## **LIBRARIES**

Students in the college have at their disposal outstanding library resources. In addition to the University Library, one of this country's great university collections, there are specialized libraries serving the needs of specific fields. The Ricker Library of Architecture and Art contains more than 49,000 books (with almost 50,000 in the same fields in the University Library), 33,000 photographs, and 9,400 clippings.

The City Planning and Landscape Architecture Library houses about 20,000 volumes of current interest, while more than 100,000 related volumes are in the University Library.

The School of Music Library, located in the Music Building, contains more than 750,000 items. These include introductory, instructive, research, and reference materials including books, editions of music, recordings, manuscripts, microfilm, and other nonbook materials.

## **DEPARTMENTS AND CURRICULA**

The College of Fine and Applied Arts consists of the Departments of Dance, Landscape Architecture, Theatre, and Urban and Regional Planning; the Schools of Architecture, Art and Design, and Music; the Small Homes Council—Building Research Council; the Krannert Art Museum and Kinkead Pavilion; and the Krannert Center for the Performing Arts. The specific functions of each department or school and the undergraduate curricula are described on the following pages.

All departments in the College of Fine and Applied Arts reserve the right to retain, exhibit, and reproduce the works submitted by students for credit in any course.

## **SPECIAL PROGRAMS**

### **Individual Study Program**

Each curriculum offered by the College of Fine and Applied Arts is designed to develop professional competence in the specific area of studies noted on the degree. Therefore, an individual study program must ensure this professional development.

A qualified student who has specific professional goals that are not met by the curricular offerings of the college may request an individual program of studies selected from courses



offered by the University. Such a program must include the basic courses prerequisite for advanced study, requirements of the University for graduation, general education sequences and requirements of the college, and professional course work that will ensure the competence expected for the particular degree.

To obtain approval for an individual study program, the student must submit his or her proposal in writing during the sophomore or junior year. The proposal should contain an outline of the complete program of course work, as well as an explanation of the professional goal desired. It should be discussed with and submitted to an approved representative of the appropriate department or school concerned with the degree, who will then forward the proposal through the executive officer of the department or school for recommendation to the college office. Final consideration and notification of the action taken on the proposal will be made by the college office.

## **Study Abroad**

The college provides the opportunity for students to obtain campus credit for foreign study and/or travel for a period of from one semester to one calendar year. Students must submit detailed proposals of plans for such study and/or travel for approval by the appropriate departmental committees and by the associate dean of the college prior to such study abroad. If approved, students register and retain their status as University students and may continue their student health insurance as if they continued to study at the Urbana-Champaign campus.

## **HONORS PROGRAM**

### **Honors at Graduation**

At graduation, the College of Fine and Applied Arts grants honors to superior students. To be eligible, students must have completed a minimum of four semesters of work or 65 hours of credit in residence at the Urbana-Champaign campus.

For the degree with honors, the student must have a grade-point average of 4.25 (A = 5.0) or better in all courses used for graduation and be in the upper 25 percent of those receiving that particular degree; for the degree with high honors, a grade-point average of 4.5 or better and the upper 15 percent; and for the degree with highest honors, a grade-point average of 4.75 or better and the upper 6 percent. Credit earned at other institutions and transferred to the University of Illinois is used in computing the student's average. Credit earned at the University of Illinois at Urbana-Champaign must be of at least the level required for the degree with honors.

## **GRADUATION REQUIREMENTS**

Students who meet the general University requirements with reference to registration, residence, scholarship, fees, rhetoric, and general education requirements, and who maintain satisfactory records, receive degrees appropriate to the curricula completed. Refer to the specific departmental and curricular requirements listed on the following pages. In addition, students must complete the required senior courses in their major field of study in residence at the Urbana-Champaign campus.

## **GENERAL EDUCATION REQUIREMENTS**

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

## **ELECTIVES AND GENERAL EDUCATION SEQUENCE REQUIREMENTS**

Electives specified in any curriculum in the College of Fine and Applied Arts must be chosen from the lists that follow. Single courses specified in the sequence lists or more advanced courses for which they are prerequisites may also be used as electives.

## General Education Sequence Requirements

To comply with the general education sequence requirements, each student in the College of Fine and Applied Arts must have a minimum of 6 semester hours in one department or in an approved sequence from different departments in each of the following three areas: the humanities, social sciences, and natural sciences (life and physical sciences).

1. A student may not use courses in his or her major area to satisfy a sequence requirement.
2. Basic foreign language courses, rhetoric and speech requirements, LAS 110 and 210, and courses numbered 199 may not be used to fulfill the sequence requirements.
3. Foreign language that is used in lieu of, or that duplicates, high school entrance requirements will not be accepted as elective credit, nor will the first semester of any other foreign language be accepted without completion of the second semester.
4. A maximum of 6 hours of credit in RHET 103, 104, 105, and 108 may be applied toward the degree. ESL 114 and 115 will apply toward the degree.
5. Approval to use any course or sequence not contained in the listings must be requested by written petition to the Office of the Associate Dean of the college prior to registration in the substitute course or courses. Approval of an adviser or instructor only is not acceptable.

### HUMANITIES SEQUENCES (6 semester hours)

AFRST—210, and HIST 215 or ANTH 315

ANTH 169, 315, 329

ARCH 210, 310-317 (not for architecture, art, landscape architecture, or urban and regional planning majors)

Art history—all courses (not for architecture, art, landscape architecture, or urban and regional planning majors)

Asian studies—all courses except introductory and intermediate language courses

Classics—all courses, except CLCIV 100; GRK 101-112, 200-202; LAT 101-114

Comparative literature—all courses

DANCE 340, 341 (not for dance majors)

English—all courses except rhetoric, business and technical writing, and ESL courses

French—all courses except FR 100-114, 205, 206, 217, 270, 313, 314

German—all courses except GER 101, 153, 211, 212, 382

HIST—all courses

Humanities—all courses

Italian—all courses except ITAL 101-104, 210, 220, 222

LING 300-305, 309, 338, 340

ARAB 305

HINDI 308

HEBR 307, 308, 311

MUSIC 130, 131, 133, 213, 214, 310-315, 317 (not for music majors)

Philosophy—all courses except those listed in physical and social sciences areas

Portuguese—all courses except PORT 101-104, 210, 212

Religious studies—all courses except RELST 111, 112, 200, and those listed in social sciences areas

Russian—all courses except RUSS 101-104, 211-214, 280, 303, 304, 307, 308, 313, 314

Scandinavian—all courses except SCAN 101-104

SLAV 319, 380, 381

Spanish—all courses except SPAN 101-104, 122-124, 210, 211, 216, 280, 282

SPCOM 141, 142, 177, 178, 207, 213, 243, 308, 315, 319, 320, 322, 342, 344, 345, 387

THEAT 110, 353, 354, 361, 362 (not for theatre majors)

### SOCIAL SCIENCES SEQUENCES (6 semester hours)

AFRST 222, 235

Anthropology—all courses except those listed in life science

Economics—all courses

FACE 170, 313

Geography—all courses except those listed in life and physical sciences

HIST—all courses

LING 225, 307, 325, 350, 370

PHIL 106, 107, 280, 336, 375, 377

Political science—all courses

POL S 150; and HIST 151, 152 or 260, 261, or 262

Psychology—all courses, except those listed in life sciences

RELST 229, 304, 328, 363

Sociology—all courses except SOC 246

SPCOM 113, 221, 230, 254, 321, 335



## NATURAL SCIENCE SEQUENCES

### Physical sciences

Astronomy—all courses

Biochemistry—all courses

Chemical engineering—all courses

Chemistry—all courses

GEOG 102, 103, 303

Geology—all courses

Mathematics—all courses, except MATH 101, 202, 203, 305-306 (cannot duplicate high school entrance requirements regardless of course placement by examination)

PHIL 202, 339

Physics—all courses

### Life sciences (courses may be taken from more than one department)

Anatomical science—all courses

ANTH 143, 240, 246, 337, 340-347, 356

Biology—all courses; BIOL 100, 101 recommended

Ecology, ethology, and evolution—all courses; EEE 105, 143 recommended

Entomology—all courses; ENTOM 118 recommended

FN 120, 220

Genetics and development—all courses

GEOG 214, 305

Microbiology—all courses; MCBIO 113 recommended

Physiology—all courses; PHYSL 103 recommended

Plant biology—all courses; PLBIO 100, 234, 260 recommended

PSYCH 103, 211, 217, 230, 246, 342, 347

SOC 246, with a course in the life sciences totaling 6 hours or more

## ELECTIVE AREAS

Electives specified in any curriculum in the College of Fine and Applied Arts must be chosen from the list that follows. Single courses specified in the general education sequence lists or more advanced courses for which they are prerequisites may also be used as electives. Always check prerequisite requirements when registering for these courses.

Air Force aerospace studies, military science, and naval science—advanced courses only (maximum of 6 hours)

Anthropology

ARCH 210, 310-317 (no courses usable as electives for architecture and art majors)

Art—all courses specified for nonmajors, and all art history courses (none usable for art and architecture majors except by petition)

African studies

Asian studies

Astronomy

Band—maximum of 3 hours (not for music majors)

Chemistry

Classics

Comparative literature

Computer science

Dance—especially DANCE 101, 102, 107, 108, 131, 150, 331, 341; maximum of 3 hours in studio courses to apply as elective credit (none for dance majors)

Ecology, ethology, and evolution

Economics

English—including advanced rhetoric, and business and technical writing

Family and consumer economics

FN 120, 220

French<sup>1</sup>

Geography

Geology

Germanic languages and literatures<sup>1</sup>

Health education

History

Human development and family studies

Humanities

Kinesiology (physical education)—maximum of 3 hours activity courses

Labor and industrial relations

Landscape architecture—not for landscape architecture majors

Latin American studies

LAS—110, 210, by petition only (maximum of 6 hours)

Library science

Life sciences

Linguistics

Mathematics<sup>1</sup>

Music—especially MUSIC 100-104, 113, 130, 131; maximum of two instrumental courses; three ensembles including bands (not for music majors)

Philosophy

Physics

Political science

Psychology

Religious studies

Slavic languages and literatures

Social sciences

Sociology

Spanish, Italian, and Portuguese

Speech communications

Theatre—especially THEAT 110, 281 (not for theatre majors)

Urban planning—not for urban and regional planning or architecture majors

---

<sup>1</sup>Cannot duplicate high school entrance or curricular requirements or prerequisites regardless of course placement by examination.

---

## SPECIFIC ELECTIVE COURSES

The following list of courses available as electives offers specialized areas of knowledge not found in previous lists. These courses have obvious professional value to many in fine and applied arts; other courses may simply be personally informative or significant. No more than 9 hours of courses in any one of these areas should be taken.

ACCY 101, 105, 201

ADV 281

AG EC 100

AGRON 121, 350

B ADM 202, 210, 247, 261, 323, 337, 344

CE 216, 230

COMM 220, 251

EE 271, 272, 288

General engineering—200- and 300-level courses

FIN 264

EPS 300, 305

JOURN 220, 251

Mechanical and industrial engineering—all courses

## PROFESSIONAL ELECTIVES

Professional electives as specified in any curriculum are:

1. Courses offered by the student's department, and
2. Technical or related courses that will aid in the development of a student's professional goal and that are approved by the student's department and college.

## School of Architecture

Architecture is concerned with shaping the environment for the achievement of human purposes. In accomplishing this, the architect has the responsibility to direct his or her professional effort in such a way as to contribute to the optimal physical, psychological, and social well-being of humanity. The education of the architect must stimulate sensitivity and understanding of human needs and must develop the ability to satisfy those needs through appropriate architectural and urban design.

The educational process must also include an understanding of the cultural context of architecture both through an awareness of historical perspective and a knowledge of contemporary society.

At the University of Illinois at Urbana-Champaign, the architecture program responds to the changing nature of the architect's professional and societal roles. The importance of advanced technology and information systems is recognized. The educational approach is broad in response to these changes and influences (not dominated by a single philosophy or direction), but firmly rooted in traditional disciplines and areas of study central to professional education



in the field. These include architectural design, structural design, history, environmental technology, building methods, technology, and construction. These areas of study are reflected in the way the architectural curriculum is arranged and in the administrative organization of the school.

## DEGREE PROGRAMS IN ARCHITECTURE

The School of Architecture offers a four-year preprofessional curriculum leading to the Bachelor of Science in Architectural Studies degree. The BSAS degree provides an undergraduate academic education in architecture that can serve as a foundation for advanced professional education. The undergraduate curriculum offers an appropriate balance of basic professional studies in architectural design, architectural history, construction, environmental technology, structures, and studies in the arts and sciences.

At the University of Illinois at Urbana-Champaign, the Master of Architecture is offered as the first professional degree. Three graduate programs following distinctly prescribed "tracks" lead to the M. Arch. degree.

Track 1 is a one-year graduate program for those holding a five-year Bachelor of Architecture professional degree. Track 2 is a two-year graduate program for those holding a four-year Bachelor of Science in Architectural Studies (or similar preprofessional degree in architecture). Track 3 is a variable length program for those holding a bachelor's degree in fields other than architecture.

Track 1 is recommended only for those who already hold a five-year B. Arch. professional degree, and those who intend to practice in foreign countries. The programs for track 2 and track 3 are accredited by the National Architectural Accrediting Board. The professional degree in architecture at the University of Illinois at Urbana-Champaign has been fully accredited since the process of accreditation began in the United States in the 1930s. For details of the graduate curriculum, please refer to the *Graduate Programs* catalog of the University of Illinois at Urbana-Champaign.

School facilities are limited, and preference will be given to the best-qualified applicants until quotas are filled at both the undergraduate and graduate levels of the program.

Since 1967, the School of Architecture has operated a one-year overseas program in Versailles, France, which is open to qualified students on a priority basis. Course offerings there parallel those available to students on the Urbana-Champaign campus but stress the European context.

The School of Architecture occupies drafting rooms, lecture rooms, and offices in the Architecture Building, Flagg Hall, and Noble Hall. The Ricker Library of Architecture and Art is located in the Architecture Building.

## UNDERGRADUATE CURRICULUM IN ARCHITECTURE

### For the Degree of Bachelor of Science in Architectural Studies

In this curriculum, normal progress is imperative. A student failing to complete any required course more than one semester later than the time designated in the curriculum is prohibited from progressive registration in architectural courses until the deficiency is corrected. To continue at the sophomore level and beyond, a student must have a cumulative grade-point average of 3.25 (A = 5.0) for all University course work attempted. For the Bachelor of Science in Architectural Studies degree, a total of 127 semester hours are required.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
HIST 111—History of Western Civilization to 1660 .....	4
ARCH 199ITA—Introduction to Architecture (or approved elective <sup>2</sup> ) .....	2
RHET 105 or 108—Composition .....	4
MATH 120—Calculus and Analytic Geometry I ...	5
Total .....	15

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
ARCH 171—Architectural Design I .....	3
ARCH 210—Introduction to the History of Architecture .....	3
ARCH 231—Anatomy of Buildings .....	4
ARTGP 188—Watercolor .....	2
Social science .....	3
Total .....	15

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
ARCH 271—Architectural Design III .....	3
ARCH 310, 311 or 312 (history of architecture) ..	3
ARCH 251—Statics and Dynamics .....	4
UP 101—Planning of Cities and Regions (or approved urban studies substitute) <sup>1</sup> .....	3
Elective <sup>2</sup> .....	3
Total .....	16

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
ARCH 371—Architectural Design V .....	6
ARCH 241—Environmental Technology I .....	4
ARCH 351—Theory and Design of Metal Structures .....	4
Elective <sup>2</sup> .....	3
Total .....	17

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
HIST 112—History of Western Civilization, 1660 to the Present .....	4
Social sciences sequence .....	3
MATH 132—Calculus and Analytic Geometry II ..	3
ARTGP 187—Drawing .....	2
CS 102—Introduction to Digital Computing .....	3
Total .....	15

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
ARCH 172—Architectural Design II .....	3
ARCH 232—Construction of Buildings .....	4
ARTGP 189—Art Experiences .....	2
Elective <sup>2</sup> .....	7
Total .....	16

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
ARCH 272—Architectural Design IV .....	3
ARCH 313 or 314 (architectural history) .....	3
ARCH 252—Strengths of Materials and Design Applications .....	4
Elective <sup>2</sup> .....	6
Total .....	16

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
ARCH 372—Architectural Design and Construction Documentation .....	6
ARCH 242—Environmental Technology II .....	4
ARCH 352—Theory and Design of Reinforced Concrete .....	4
ARCH 315, 316, or 318 (architectural history) .....	3
Total .....	17

<sup>1</sup>Approval by the School of Architecture is required.

<sup>2</sup>General education electives are any courses on the approved college list: minimum of 12, maximum of 21 hours. Professional electives are courses in architecture and related professional disciplines approved by the School of Architecture: no minimum, maximum of 9 hours.

## School of Art and Design

The School of Art and Design offers Bachelor of Fine Arts degrees in art education, crafts, graphic design, the history of art, industrial design, painting, photography, and sculpture. The first year of each curriculum is basic and cultural. Specialization begins in the second year.

First-year students who wish to concentrate in the history of art will be admitted into the history of art curriculum. All other first-year students will be admitted to the general curriculum in art and design. After completing one year in the general program, a student must select one of the more specialized art and design curricula.

Courses in the history and appreciation of art and certain courses in studio work are open to students from other colleges of the University.

A field of concentration in art history is also offered in the College of Liberal Arts and Sciences (see page 254).

Courses in cinematography and printmaking are offered at introductory, advanced, and graduate levels.

The degree of Master of Arts is offered with a major in either art history or art education. The degree of Master of Fine Arts in art and design is offered with majors in ceramics, glass, graphic design, industrial design, metals, painting, photography, printmaking, and sculpture. The



degree of Doctor of Philosophy in the history of art is offered jointly by the School of Art and Design and the School of Architecture. The degree of Doctor of Education in art education is offered jointly by the School of Art and Design and the College of Education. All graduate degrees are offered under the regulations of the Graduate College.

The school’s administrative offices are in the Art and Design Building at 408 East Peabody Drive, Champaign, Illinois 61820. The school occupies studios, drafting rooms, classrooms, and offices in several different University buildings.

PORTFOLIO AND MINIMUM GRADE REQUIREMENTS

A portfolio review may be required for placement in any art and design course beyond the entry level of the foundation program. After completing the foundation program, a student who meets or exceeds minimum grade requirements listed below may apply for admission to one of the Bachelor of Fine Arts (B.F.A.) degree curricula. Higher than minimum grade-point averages may be required due to the limits of faculty and facilities. Several B.F.A. curricula also select students by portfolio review near the end of the foundation year. Minimum grade-point averages are:

Foundation Program, Crafts, Graphic Design, History of Art, Painting, and Sculpture .....	3.25
Art Education, Industrial Design, and Photography .....	3.5
Individual Study Programs .....	4.0

FOUNDATION PROGRAM FOR ALL ART AND DESIGN CURRICULA

FIRST YEAR		FIRST YEAR	
FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
ARTHI 111—Ancient and Medieval Art .....	4	ARTHI 112—Renaissance and Modern Art .....	4
ARTGP 113—Orientation to Art and Design .....	0	ARTGP 118—Drawing II .....	3
ARTGP 117—Drawing I .....	3	ARTGP 120—Design II .....	3
ARTGP 119—Design I .....	3	Electives .....	6
RHET 105 or 108—Composition .....	4	Total .....	16
Elective .....	2		
Total .....	16		

This first-year requirement is included in all art and design curricula that follow.

CURRICULUM IN ART EDUCATION

For the Degree of Bachelor of Fine Arts in Art Education<sup>1</sup>

The curriculum in art education requires 130 credit hours and prepares students for positions as teachers of art in the public schools, grades kindergarten through twelve. The program places emphasis on methods, materials, processes, and practice teaching in Illinois schools. Upon completion, graduates are eligible for the Standard Special Certificate as defined by the Illinois State Teacher Certification Board.

For teacher education requirements applicable to all curricula, see pages 87 to 92.

GENERAL REQUIREMENTS	HOURS
SPCOM 111 and 112, or RHET 105 or 108 and a speech communication performance elective .....	6-7
General psychology .....	3
One approved sequence of 6 hours in one of the natural sciences .....	6
One approved sequence of 6 hours in one of the humanities .....	6
American government (state and federal constitutions) .....	3
American history .....	3
Health and/or physical education activity .....	3
Total .....	30-31

ART HISTORY

Introduction to ancient and medieval art .....	4
Introduction to Renaissance and modern art .....	4
Advanced art history (200 or 300 level) .....	3
Total .....	11

GENERAL ART AND DESIGN

Orientation to art ..... 0

Drawing I and II ..... 6

Design I and II ..... 6

Life Drawing I and II ..... 4

Painting Composition I and II ..... 4

Total ..... 20

ART EDUCATION

Art education laboratory ..... 4

Practicum in teaching art ..... 4

Art curriculum and practicum in the elementary grades ..... 3

Organization of public school art programs ..... 3

Total ..... 14

PROFESSIONAL EDUCATION<sup>2</sup>

Foundations of American education ..... 2

Psychology of teaching and learning ..... 3

Professional seminar in art education ..... 4

Educational practice ..... 10

Total ..... 19

ELECTIVES

Art electives<sup>3</sup> ..... 21

General electives (see college list of approved electives) ..... 6

General or professional electives ..... 8-9

Total ..... 35-36

<sup>1</sup>Students are advised that general education requirements are being revised to comply with new state mandates. For more information, consult the certification officer (120 Education Building).

<sup>2</sup>Art education courses are applicable to professional education requirements for teacher certification.

<sup>3</sup>A minimum of 8 semester hours is required in one of the following areas of specialization: sculpture, painting, ceramics, glass, jewelry and metalworking, photography, printmaking.

Minor in Art Education

Required courses in drawing and design must precede all other course work in the minor area.

	HOURS
ART&D 107—Elementary Drawing .....	2
ART&D 185—Design I .....	2
Total .....	4
Elect hours from the following courses:	
ART&D 105—Introduction to Watercolor Painting .....	2
ART&D 106—Introduction to Oil Painting .....	2
ART&D 150—Beginning Sculpture .....	2
ARTCR 160—Jewelry I .....	2
ARTCR 170—Ceramics I .....	2
Total .....	6

ART EDUCATION

ARTED 204—Art Education Laboratory ..... 2

ARTED 206—Practicum in Teaching Art ..... 4

ARTED 207--Art Curriculum Development and Practicum in the Elementary Schools ..... 3

Total ..... 9

HISTORY AND APPRECIATION OF ART

Elect two from the following three courses:

ART&D 140—Introduction to Art ..... 3

ARTHI 115—Art Appreciation ..... 3

ARTHI 116—Masterpieces of Art ..... 6

Total ..... 6-9



CURRICULUM IN CRAFTS

For the Degree of Bachelor of Fine Arts in Crafts

The curriculum in crafts requires 122 credit hours and emphasizes professional training for the development of the self-sustaining craftsman, the teacher of crafts, and the designer-craftsman in industry. The curriculum provides a choice of three areas of concentration: ceramics, glassworking, and metalworking. The emphasis within these areas of concentration is on the development of individual design capabilities and perceptions and upon the mastery of comprehensive technical skills. In conjunction with these individual areas of emphasis, each student is given experience in other craft media.

GENERAL REQUIREMENTS	HOURS
RHET 105 or 108—English composition	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences	18
Electives (see college list of approved electives)	14-18
Total	36-40

ART HISTORY

ARTHI 111—Ancient and Medieval Art	4
ARTHI 112—Renaissance and Modern Art	4
Advanced art history	6
Total	14

GENERAL ART AND DESIGN

ARTGP 113—Orientation to Art and Design	0
ARTGP 117 and 118—Drawing I and II	6
ARTGP 119 and 120—Design I and II	6
ARTID 133 and 134—Design Workshop and Introduction to Industrial Design	5
ARTPA 125 and 126—Life Drawing	4
Total	21

ART ELECTIVES	12-14
---------------	-------

PROFESSIONAL ELECTIVES	12-14
------------------------	-------

CRAFTS

ARTCR 160—Jewelry I	2
ARTCR 170—Ceramics I	2
Allied crafts	3-4
Major sequence in ceramics or metalworking: select from ARTCR 161, 171, 260, 261, 264, 265, 270, 271, 274, 275	18
Total	25-26

CURRICULUM IN GRAPHIC DESIGN

For the Degree of Bachelor of Fine Arts in Graphic Design

The curriculum in graphic design requires 122 credit hours and prepares the student for entrance into the professional practice in visual communications. Studio work encompasses typography, image making, production techniques, and the process of communication planning.

GENERAL REQUIREMENTS	HOURS
RHET 105 or 108—English composition	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences	18
Total	22

ART HISTORY

ARTHI 111—Ancient and Medieval Art	4
ARTHI 112—Renaissance and Modern Art	4
Advanced art history	6
Total	14

GENERAL ART AND DESIGN

ARTGP 113—Orientation to Art and Design	0
ARTGP 117 and 118—Drawing I and II	6
ARTGP 119 and 120—Design I and II	6
Total	12

GRAPHIC DESIGN

ARTGD 100—Design History Survey .....	3
ARTGD 120—Visual Organization .....	3
ARTGD 130—Production .....	3
ARTGD 140—Typography .....	3
ARTGD 210—Photo/Graphics .....	3
ARTGD 220—Image Making .....	3
ARTGD 230—Advanced Typography .....	3
ARTGD 240—Methodology .....	3
ARTGD 370—Advanced Graphic Design I .....	3
ARTGD 380—Advanced Graphic Design II .....	3
Total .....	30

ELECTIVES

General electives (see college list of approved electives) .....	20-24
Art and design and other professional electives .....	20-24
Minimum electives requirement .....	
Total .....	44

CURRICULUM IN THE HISTORY OF ART

For the Degree of Bachelor of Fine Arts in the History of Art

The curriculum in the history of art requires 122 credit hours and offers a broad cultural education that unites academic and studio training. The curriculum provides sound preparation for the graduate study required for museum work or teaching at the college level.

GENERAL REQUIREMENTS

HOURS

RHET 105 or 108—English composition .....	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences .....	18
Electives (see college list of approved electives) .....	28-46
(One foreign language through the 104 level or equivalent is required. French or German is strongly recommended.) Supportive electives (in addition to the general education requirements, a minimum of 6 hours can be chosen with the consent of the adviser in one of the following areas: ancient and modern literature, anthropology, classics, history, philosophy) .....	6
Total .....	56-74

SUPPORTING REQUIREMENTS IN ART

ARTHI 111—Ancient and Medieval Art .....	4
ARTHI 112—Renaissance and Modern Art .....	4
ARTGP 113—Orientation to Art and Design .....	0
ARTGP 117 and 118—Drawing I and II .....	6
ARTGP 119 and 120—Design I and II .....	6
Art electives .....	10-16
Total .....	30-36

ADVANCED ART HISTORY

Advanced art history .....	18-36
----------------------------	-------

CURRICULUM IN INDUSTRIAL DESIGN

For the Degree of Bachelor of Fine Arts in Industrial Design

The curriculum in industrial design requires 122 credit hours and provides education in three-dimensional design for production, to meet the needs of people and their environment. Emphasis is placed on the awareness of the market demand for design, cognizance of methods and materials of production and their relative costs, creation of designs that are in visual harmony with their environment and that are satisfying to the consumer, and responsiveness to the changes in technology and cultural patterns.

GENERAL REQUIREMENTS

HOURS

RHET 105 or 108—English composition .....	4
One approved sequence of 9 hours in humanities .....	9
One approved sequence of 9 hours in social sciences .....	9
One approved sequence of 8 hours in natural sciences .....	8
PSYCH 258 or I E 305 .....	3
Total .....	33



ART HISTORY

ARTHI 111—Ancient and Medieval Art ..... 4

ARTHI 112—Renaissance and Modern Art ..... 4

ARTGD 100—Design History Survey ..... 3

Advanced art or architecture history ..... 3

Total ..... 14

GENERAL ART AND DESIGN

ARTGP 113—Orientation to Art and Design ..... 0

ARTGP 117 and 118—Drawing I and II ..... 6

ARTGP 119 and 120—Design I and II ..... 6

ARTGP 121 and 122—Drawing Theory ..... 4

ARTGD 100—Design History Survey ..... 3

ARTGD 120—Visual Organization ..... 3

Total ..... 22

INDUSTRIAL DESIGN

ARTID 133 and 134—Design Workshop and Introduction to Industrial Design ..... 5

ARTID 175—Design Methodology ..... 2

ARTID 271 and 272—Materials and Processes I and II ..... 6

ARTID 275 and 276—Industrial Design I and II ..... 6

ARTID 277 and 278—Advanced Industrial Design I and II ..... 8

ARTID 280—Professional Practices ..... 2

Minimum electives requirement

Total ..... 29

ELECTIVES

Technical electives from approved list, minimum ..... 6

Art electives ..... 6-10

General electives (see college list of approved electives) ..... 11-15

Total ..... 27

TECHNICAL ELECTIVES

ADV 281 ..... 3

ADV 382 ..... 3

ADV 383 ..... 3

ARCH 251 ..... 4

ARCH 252 ..... 4

ARCH 323 ..... 3

B ADM 202 ..... 3

B ADM 210 ..... 3

B ADM 247 ..... 3

B ADM 320 ..... 3

B ADM 344 ..... 3

COMM 220 ..... 3

C S 101 ..... 3

C S 103 ..... 3

Mathematics (calculus or analytic geometry) ..... 3

PHYCS 140 ..... 3

PHYCS 150 ..... 3

PHYSL 305 ..... 4

PSYCH 356 ..... 3

CURRICULUM IN PAINTING

For the Degree of Bachelor of Fine Arts in Painting

The curriculum in painting requires 122 credit hours and provides extensive training in preparation for professional practice as an artist.

The first year is devoted primarily to the study of design, composition, and the acquisition of both representational and abstract drawing skills. The second year concentrates on introducing the student to beginning painting skills and techniques with further studies in drawing and composition. The last two years are devoted to the development of individual creative expression in painting and other media.

When followed by a program leading to a degree of Master of Fine Arts in painting, this curriculum is recommended as preparation for teaching painting and drawing and related subjects at the college level.

GENERAL REQUIREMENTS	HOURS
RHET 105 or 108—English composition .....	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences .....	18
Total .....	22
ART HISTORY	
ARTHI 111—Ancient and Medieval Art .....	4
ARTHI 112—Renaissance and Modern Art .....	4
Advanced art history .....	6
Total .....	14
GENERAL ART AND DESIGN	
ARTGP 113—Orientation to Art and Design .....	0
ARTGP 117 and 118—Drawing I and II .....	6
ARTGP 119 and 120—Design I and II .....	6
ARTPA 125 and 126—Life Drawing .....	4
ARTPA 225 and 226—Intermediate Drawing .....	4
Total .....	20
PAINTING	
The student must complete twelve courses in painting and composition for a minimum of 30 hours. Qualified students are encouraged to arrange special projects in conjunction with advisers. Painting and composition courses currently include:	
ARTPA 141 and 142—Beginning Painting I and II .....	4
ARTPA 143 and 144—Painting Composition I and II .....	4
ARTPA 231 and 232—Intermediate Composition .....	6
ARTPA 233 and 234—Advanced Composition .....	6
ARTPA 243 and 244—Figure Painting .....	4
ARTPA 245 and 246—Advanced Painting and Drawing .....	6
Total .....	30
ELECTIVES	
General electives (see college list of approved electives) .....	14-18
Professional electives (including one course in printmaking) .....	18-22
Minimum electives requirement	
Total .....	36

CURRICULUM IN PHOTOGRAPHY

For the Degree of Bachelor of Fine Arts in Photography

The curriculum in photography requires 122 credit hours; its purpose is to encourage the study of photographic media for personal expression, to explore the social implications of pictures, and to develop the skills needed for careers in photography. General art requirements and electives provide a broad foundation in the visual arts, and photography courses provide a strong background in the history, theory, and practice of photography as art.

A graduating senior will be required to complete a portfolio of photographs under the supervision of a photography faculty adviser. Students must provide certain materials in all photography studio classes. These include film, paper, and a fully adjustable 35mm or 120 roll film camera.

GENERAL REQUIREMENTS	HOURS
RHET 105 or 108—English composition .....	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences .....	18
An additional 6 hours in one approved humanities sequence .....	6
Total .....	28
ART HISTORY	
ARTHI 111—Ancient and Medieval Art .....	4
ARTHI 112—Renaissance and Modern Art .....	4
ARTHI 357—History of Photography .....	3
Advanced art history .....	3
Total .....	14



GENERAL ART AND DESIGN

ARTGP 113—Orientation to Art and Design .....	0
ARTGP 117 and 118—Drawing I and II .....	6
ARTGP 119 and 120—Design I and II .....	6
Total .....	12

PHOTOGRAPHY

ARTPH 115—Basic Photography .....	3
ARTPH 215—Photography II .....	3
ARTPH 216—View Camera and Studio .....	3
ARTPH 315—Photography III .....	3
ARTPH 316—Advanced Photography .....	6
ARTPH 350—Photography Seminar .....	6
Total .....	24

PHOTOGRAPHY ELECTIVES (choose a minimum of 9 hours of credit)

ARTPH 220—Color Photography .....	3
ARTPH 291—Individual Photography Problems .....	variable
ARTPH 315—Photography III (second semester as an elective) .....	3
ARTPH 330—Alternative Processes .....	3
ARTPH 331—Digital Photography .....	3
ARTPH 332—Experimental Visualization Technologies .....	3
ARTPH 360—Video for Artists I .....	3
ARTPH 361—Video for Artists II .....	3
ARTPH 398—Photography Workshop .....	3
Total .....	9-17

PROFESSIONAL ELECTIVES

Art and design courses other than photography .....	9-17
---	------

GENERAL ELECTIVES (see college list of approved electives) .....	18
--	----

CURRICULUM IN SCULPTURE

For the Degree of Bachelor of Fine Arts in Sculpture

The curriculum in sculpture requires 122 credit hours and provides a broad and solid foundation in the fundamental disciplines of drawing, design, and painting, including both traditional and contemporary concepts. The learning of the time-honored techniques of sculpture such as modeling and carving is required, and experimentation with welding, metal casting, and plastics is fostered. The student is encouraged to experience a wide range of materials, techniques, methods, and styles.

GENERAL REQUIREMENTS	HOURS
RHET 105 or 108—English composition .....	4
One approved sequence of 6 hours in each of the following areas: humanities, natural sciences, and social sciences .....	18
Total .....	22

ART HISTORY

ARTHI 111—Ancient and Medieval Art .....	4
ARTHI 112—Renaissance and Modern Art .....	4
Advanced art history .....	6
Total .....	14

GENERAL ART AND DESIGN

ARTGP 113—Orientation to Art and Design .....	0
ARTGP 117 and 118—Drawing I and II .....	6
ARTGP 119 and 120—Design I and II .....	6
ARTPA 125 and 126—Life Drawing .....	4
ARTPA 141 and 142—Beginning Painting I and II .....	4
ARTCR 160—Jewelry I .....	2
ARTCR 170—Ceramics I .....	2
Total .....	24

SCULPTURE

The professional student must complete ten courses in sculpture for a minimum of 24 hours. Qualified students are encouraged to arrange special projects in conjunction with advisers. Sculpture courses currently include:

ARTSC 151 and 152—Sculpture .....	4
ARTSC 253 and 254—Intermediate Sculpture I and II .....	4
ARTSC 255 and 256—Sculpture Materials and Techniques I and II .....	6
ARTSC 257 and 258—Advanced Sculpture I and II .....	4
ARTSC 259 and 260—Advanced Sculpture Materials and Techniques I and II .....	6
Total .....	24

ELECTIVES

General electives (see college list of approved electives) .....	20-24
Professional electives .....	14-18
Minimum electives requirement .....	
Total .....	38

Department of Dance

The Department of Dance is an autonomous unit in the College of Fine and Applied Arts, and, as such, is unique within the state. The resident dance faculty of six full-time and two part-time members is augmented by visiting artists-in-residence on a continual basis. There are approximately forty undergraduate and twelve graduate students enrolled in the major program. The teaching staff also includes graduate teaching assistants who teach classes in modern dance, ballet, and jazz for nondance majors.

The program focus at the graduate and undergraduate levels is on the professional preparation of performers, choreographers, and studio teachers. Two degree programs are offered, leading to the Bachelor of Fine Arts and Master of Fine Arts degrees. This is primarily a contemporary dance department in choreographic and performance focus. Ballet and contemporary technique are integral components of training; classes in jazz, tap, and theatre dance are also included in the major curriculum. Admission is by audition.

The Department of Dance is located in the Krannert Center for the Performing Arts and utilizes the exceptional performing and production resources of the center. Five department concerts per year are produced in the theatres of the Krannert Center, including two concerts of student choreography. Numerous opportunities for performance exist with the Illinois Dance Theatre, in faculty and student concerts, and in musical and opera productions at the Krannert Center.

CURRICULUM IN DANCE

For the Degree of Bachelor of Fine Arts in Dance

The B.F.A. curriculum in dance is an intensive program of study for the dedicated student, offering concentration in the areas of technique, composition, and performance. The curriculum also includes requirements in production, improvisation, music theory and literature for dance, teaching, history, theory and philosophy, notation, movement theories, and repertory. Electives may be taken in ballet, modern, tap, and jazz; advanced improvisation; Labanotation, accompaniment; choreographer-composer workshop; and independent study.

Program requirements include core daily technique classes consisting of three modern and two ballet classes per week each semester in residence, plus elective technique classes for a minimum of 1 additional credit hour per semester. A minimum of two courses in other dance forms (jazz, tap, ballroom, etc.) is required. Technique placement is assigned by the faculty, and majors must achieve the advanced technical level in modern and the intermediate level in ballet for a minimum of two semesters prior to graduation. The improvisation/composition sequence consists of a minimum of 8 hours of studio courses culminating in the performance of a senior choreographic project. A minimum of 6 hours of credit is required in performance/repertory courses. The curriculum includes as much as 33 hours of credit in professional electives, which may be taken in professional dance courses and/or related arts and sciences.

Evaluation of majors is an ongoing process. Continued enrollment in the program is contingent upon satisfactory performance. A student is expected to maintain a minimum 3.75 grade-point average in all professional course work and a 4.0 cumulative average in studio classes in order to remain in good standing in the department.



It is possible for transfer students to complete degree requirements in a three-year period contingent upon prior completion of general education requirements and the fulfillment of the advanced technique requirement for two semesters prior to graduation.

A total of 130 hours is required for this degree.

GENERAL EDUCATION	HOURS
RHET 105 or equivalent .....	4-6
Humanities sequence <sup>1</sup> .....	6
Social sciences sequence <sup>1</sup> .....	6
Natural sciences sequence <sup>1</sup> .....	6
Total .....	22-24

PROFESSIONAL COURSES IN DANCE

Technique .....	minimum 34
DANCE 160, 166, 260, 266, 360, and 366	
4 credit hours per semester, to include core technique classes each semester in residence, consisting of three modern and two ballet classes per week (3 hours of credit), plus elective technique courses for a minimum of 1 additional credit hour per semester.	
A minimum of two courses (2 credit hours) in other dance forms (jazz, tap, ballroom, etc.) is also required.	
Improvisation .....	2
DANCE 162—Improvisation I	
DANCE 163—Improvisation II	
Composition .....	6
DANCE 164—Beginning Composition	
DANCE 264—Intermediate Composition	
DANCE 365—Advanced Composition	
Production .....	4
DANCE 131 and 331—Production Practicum (1 hour per laboratory for a total of 4 hours)	
Music for dance .....	6
DANCE 168—Music Theory and Practice for Dance	
DANCE 269—Music Literature for Dance	
Dance education .....	2-3
One of the following:	
DANCE 243—Creative Dance for Children	
DANCE 351—Supervised Teaching Project	
Orientation to dance .....	2
DANCE 150—Orientation to Dance	
Dance history .....	6
DANCE 340—History of the Dance I	
DANCE 341—History of the Dance II	
Repertory and performance .....	6
DANCE 130 and 330—Performance Practicum (1-2 hours per dance)	
DANCE 335—Dance Repertory Workshop (2-4 hours)	
Theory and philosophy of dance .....	3
DANCE 346—Theory and Philosophy of Dance	
Theories of movement/notation .....	6
DANCE 345—Theories and Fundamentals of Movement (3 hours)	
DANCE 347—Labanotation I (3 hours)	
Total .....	77-78

ELECTIVES<sup>2</sup> ..... 28-33

Recommended:	
Additional courses in ballet and modern technique: DANCE 160, 166, 260, 266, 360, 366 (up to 16 additional hours may be counted toward degree requirements) .....	(per course) 1-2
DANCE 130—Performance Practicum <sup>3</sup> .....	(per dance) 1
DANCE 250—Dance Forms (including jazz and tap) .....	(per course) 1
DANCE 328—Choreographer-Composer Workshop .....	2
DANCE 330 and 335—(performance and repertory courses) <sup>3</sup> .....	(per dance) 1-2
DANCE 348—Labanotation II .....	3
DANCE 351—Independent Study and Special Topics .....	(maximum) 8
DANCE 363—Improvisation III .....	1
DANCE 369—Accompaniment for Dance .....	1
ART&D 140—Introduction to Art <sup>4</sup> .....	3
ART&D 180—Introduction to Cinematography <sup>4</sup> .....	3
MUSIC 158—Group Piano for Non-Music Majors <sup>4</sup> .....	2
MUSIC 181—Voice <sup>4</sup> .....	2-3
THEAT 170—Fundamentals of Acting <sup>4</sup> .....	3

THEAT 175—Improvisation in Acting <sup>4</sup> .....	4
THEAT 291—Costume Design for Dance .....	2
THEAT 332—Stage Management .....	4
THEAT 340—Lighting Design for Dance .....	4
THEAT 355—History and Development of American Musical Theatre .....	3
THEAT 372—Introduction to Theatre Management .....	3

<sup>1</sup>See college-approved general education sequences.

<sup>2</sup>A minimum of 10 hours of electives must be in the area of general electives (see college-approved list). A minimum of 5 hours must be in the area of professional electives. It is strongly recommended that dance majors consider professional electives outside the dance area itself.

<sup>3</sup>A maximum of 16 hours may be accumulated toward degree requirements in DANCE 130, 330, and 335.

<sup>4</sup>These courses will also fulfill the College of Fine and Applied Arts general electives requirements for dance majors.

## Department of Landscape Architecture

The Department of Landscape Architecture offers a four-year undergraduate curriculum, leading to the professional degree of Bachelor of Landscape Architecture.

The curriculum is a balanced program of technical, design, and general education courses that equips the student with the necessary skills for entry-level professional practice in private offices or public agencies. Program requirements include studio design courses, and classes in plant materials and planting design, construction, graphic and computer-assisted design, and history and theory. The curriculum includes as much as 15 hours of credit in supporting electives, which are taken in related art, scientific, and technical courses.

The departmental headquarters and library are located in Mumford Hall. Classrooms, studios, and offices are located in Mumford Hall and at 1203, 1205, and 1205 <sup>1</sup>/<sub>2</sub> West Nevada Street, Urbana.

## CURRICULUM IN LANDSCAPE ARCHITECTURE

### For the Degree of Bachelor of Landscape Architecture

This curriculum requires 128 semester hours of credit for graduation.

#### FIRST YEAR

FIRST SEMESTER	HOURS
L A 101—Introduction to Landscape Architecture .....	2
GEOG 103—Earth's Physical Systems <sup>3</sup> .....	4
RHET 105 or 108—Composition .....	4
Elective (general education sequence) <sup>1</sup> .....	6
Total .....	16

#### SECOND YEAR

FIRST SEMESTER	HOURS
L A 133—Basic Landscape Design .....	5
L A 150—Landscape Surveys .....	3
L A 180—Visual Communications I .....	3
Elective (general education sequence) <sup>1</sup> .....	6
Total .....	17

#### THIRD YEAR

FIRST SEMESTER	HOURS
L A 235—Recreation and Community Design .....	5
L A 243—Site Engineering .....	4
HORT 201—Identification and Use of Woody Ornamental Plants I .....	3
U P 101—Planning of Cities and Regions .....	3
Total .....	15

#### FIRST YEAR

SECOND SEMESTER	HOURS
L A 214—History of Landscape Architecture .....	3
PLBIO 102—Plants, Environment, and Man <sup>3</sup> .....	3
MATH 114 or 116—Trigonometry .....	2-5
Elective (general education sequence) <sup>1</sup> .....	6
Total .....	14-17

#### SECOND YEAR

SECOND SEMESTER	HOURS
L A 134—Site Design .....	5
L A 142—Landform Design and Construction .....	3
L A 170—Psychological, Social, and Cultural Issues in Design of Outdoor Spaces .....	3
L A 181 Visual Communications II .....	3
Supporting elective <sup>2</sup> .....	3
Total .....	17

#### THIRD YEAR

SECOND SEMESTER	HOURS
LA 236—Design Workshops I .....	5
LA 244—Landscape Construction .....	4
HORT 202—Identification and Use of Woody Ornamental Plants II .....	3
Supporting elective <sup>2</sup> .....	3
Total .....	15



FOURTH YEAR	
FIRST SEMESTER	HOURS
L A 337—Regional Landscape Design .....	5
L A 252—Plant Materials and Design .....	3
Supporting elective <sup>2</sup> .....	6
Elective .....	3
Total .....	17

FOURTH YEAR	
SECOND SEMESTER	HOURS
L A 246—Professional Practice .....	1
L A 253—Planting Design .....	3
L A 338—Design Workshops II .....	5
Supporting elective <sup>2</sup> .....	3
Elective .....	2-5
Total .....	14-17

<sup>1</sup>A minimum of 6 credit hours of approved sequence courses is required in each of the areas of humanities, social sciences, and natural sciences for a minimum of 18 credit hours (see college list of approved general education sequences).

<sup>2</sup>A minimum of 15 credit hours of professionally related courses selected from the recommended list of supporting electives is required, with a minimum of 3 credit hours in each of the categories of history, communications, techniques, and environment.

<sup>3</sup>PLBIO 102 or GEOG 103 may be used as one of the two natural sciences sequence courses (6 hours total required) with the appropriate subsequent course (see college list of approved general education sequences).

A student must have and maintain a minimum 3.5 cumulative University of Illinois grade-point average and a minimum 3.5 grade-point average in all required landscape architecture courses to continue beyond the sophomore-level year in landscape architecture.

## School of Music

The School of Music occupies the Music Building, Smith Memorial Hall, the Harding Band Building, and space in the Krannert Center for the Performing Arts. These facilities include studios, classrooms, practice rooms, experimental-electronic music and computer laboratories, musical instruments, audio equipment, and several auditoriums used for public concerts and recitals.

The Music Library is one of the largest repositories of music items in America. The faculty and students of the school present approximately 350 concerts and recitals throughout the year, both on and off campus. In addition, visiting artists and scholars from throughout the world complement the concert and academic offerings provided on the Urbana-Champaign campus.

The school offers professional undergraduate study leading to the degree Bachelor of Music and the degree Bachelor of Science in Music Education. Undergraduate students whose musical interests are in the broad historical, cultural, and theoretical aspects of music (rather than professional training) may want to investigate the Bachelor of Arts degree offered through the College of Liberal Arts and Sciences, described on page 281. Graduate degrees in a variety of fields of study at the master's and doctoral levels and an advanced certificate in music education are offered through the Graduate College.

Bands, choral ensembles, orchestras, jazz bands, new music ensembles, opera theatre, and many other musical organizations are open to music and nonmusic majors and members of the university and civic communities by audition. Private lessons and courses in history, theory, and music appreciation are open to all qualified students in the University.

All applicants for admission to the School of Music must apply to the University of Illinois and must also audition successfully on their major performance instrument or in voice. On-campus auditions are preferred, but taped auditions are acceptable under certain circumstances. In addition, applicants for music composition-theory and history of music majors must submit original scores or other pertinent writings to substantiate their ability to pursue work in these areas.

For complete information concerning audition schedules, special admission requirements, and curricula, prospective students should contact the coordinator of undergraduate admissions, School of Music, 1114 West Nevada Street, Urbana IL 61801, (217) 244-0551.

CURRICULA IN MUSIC

For the Degree of Bachelor of Music

These curricula require 130 semester hours of credit for graduation. The required general education sequences in the humanities, social sciences, and natural sciences and elective courses must be chosen from the college elective and general education sequence lists starting on page 212.

Public performance is an integral part of the training in applied music, and all students, when sufficiently prepared, are required to participate in student recitals.

All students are required to enroll in at least one qualifying performance ensemble each semester in residence with a maximum of 10 semester hours of ensemble applicable to their degree.

The sequences of classes given below are based on a typical four-year course of study but may be modified with an adviser's approval to meet the student's individual needs.

INSTRUMENTAL MUSIC MAJOR

Students may major in piano, organ, violin, viola, violoncello, string bass, flute, oboe, clarinet, saxophone, bassoon, trumpet or cornet, horn, euphonium, baritone, trombone, tuba, percussion, or harp.

A student enrolled in this program takes two applied subjects, one a major (32 semester hours) and the other a minor (8 semester hours).

Piano and organ majors may count as many as 4 semester hours of chamber music and/or the equivalent in studio accompanying toward the ensemble requirement.

Third- and fourth-year students must present satisfactory public junior and senior recitals as part of the requirements for the Bachelor of Music degree.

FIRST YEAR

FIRST SEMESTER	HOURS
Major applied music subject <sup>1,2</sup> .....	4
Minor applied music subject .....	2
MUSIC 101—Fundamentals of Music Theory and Practice I .....	3
MUSIC 110—Basic Music Literature .....	2
Music ensemble .....	1
RHET 105 or 108, or SPCOM 111—Verbal Communication .....	3-4
Total .....	15-16

SECOND YEAR

FIRST SEMESTER	HOURS
Major applied music subject .....	4
Minor applied music subject .....	2
MUSIC 103—Fundamentals of Music Theory and Practice III .....	3
MUSIC 108—Aural Skills II .....	1
MUSIC 213—History of Music I .....	3
Music ensemble .....	1
Foreign language .....	4
Total .....	18

THIRD YEAR

FIRST SEMESTER	HOURS
Major applied music subject .....	4
Music theory <sup>3</sup> .....	3
Music history <sup>4</sup> .....	3
Music ensemble .....	1
Electives .....	5
Total .....	16

FIRST YEAR

SECOND SEMESTER	HOURS
Major applied music subject .....	4
Minor applied music subject .....	2
MUSIC 102—Fundamentals of Music Theory and Practice II .....	3
MUSIC 107—Aural Skills I .....	1
Music ensemble .....	1
Electives, or SPCOM 112—Verbal Communication .....	2-3
Electives .....	2
Total .....	15-16

SECOND YEAR

SECOND SEMESTER	HOURS
Major applied music subject .....	4
Minor applied music subject .....	2
MUSIC 104—Fundamentals of Music Theory and Practice IV .....	3
MUSIC 109—Aural Skills III .....	1
MUSIC 214—History of Music II .....	3
Music ensemble .....	1
Foreign language .....	4
Total .....	18

THIRD YEAR

SECOND SEMESTER	HOURS
Major applied music subject .....	4
Music theory <sup>3</sup> .....	3
Music history <sup>4</sup> .....	3
Music ensemble .....	1
Electives .....	5
Total .....	16



FOURTH YEAR	
FIRST SEMESTER	HOURS
Major applied music subject .....	4
MUSIC 330—Applied Music Pedagogy, or MUSIC 331—Piano Pedagogy I <sup>5</sup> .....	2
Music ensemble .....	1
Electives .....	9
Total .....	16

FOURTH YEAR	
SECOND SEMESTER	HOURS
Major applied music subject .....	4
MUSIC 330—Applied Music Pedagogy, or MUSIC 332—Piano Pedagogy II <sup>5</sup> .....	2
Music ensemble .....	1
Electives .....	9
Total .....	16

<sup>1</sup>String majors will register for MUSIC 269 (1 semester hour) concurrently with the major applied subject (3 semester hours), for a total of 4 semester hours, each semester.

<sup>2</sup>Concurrent registration in MUSIC 250 is required for all students who register for any of MUSIC 183-186, 383-386.

<sup>3</sup>The music theory requirement for the third year is to be satisfied by MUSIC 300 and 308, 3 semester hours each, or by MUSIC 308, 6 semester hours, with each semester devoted to a specifically listed topic.

<sup>4</sup>To be chosen from MUSIC 310-317, 333-337.

<sup>5</sup>For string and piano majors only. String majors will register for MUSIC 330; piano majors will register for MUSIC 331 and 332. Other majors may choose 2 semester hours of electives.

Music Composition-Theory Major

In this major, emphasis may be placed on music composition or on the theory of music. Necessary course adjustments require approval of the composition-theory division.

If the emphasis is on composition, the fourth-year student must present a satisfactory senior recital of original compositions. If the emphasis is on theory, an advanced project determined and approved by the composition-theory division is required in the fourth year.

FIRST YEAR	
FIRST SEMESTER	HOURS
Applied music <sup>1</sup> .....	2
MUSIC 101—Fundamentals of Music Theory and Practice I .....	3
MUSIC 106—Beginning Composition .....	2
MUSIC 110—Basic Music Literature .....	2
Music ensemble .....	1
RHET 105 or 108, or SPCOM 111—Verbal Communication .....	3-4
Electives .....	2
Total .....	15-16

FIRST YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 102—Fundamentals of Music Theory and Practice II .....	3
MUSIC 106—Beginning Composition .....	2
MUSIC 107—Aural Skills I .....	1
Music ensemble .....	1
Electives, or SPCOM 112—Verbal Communication .....	3-4
Electives .....	2
Total .....	14-15

SECOND YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
MUSIC 103—Fundamentals of Music Theory and Practice III .....	3
MUSIC 108—Aural Skills II .....	1
MUSIC 200—Instrumentation I .....	2
MUSIC 206 <sup>2</sup> —Intermediate Composition .....	2
MUSIC 213—History of Music I .....	3
Music ensemble .....	1
French, German, or Italian .....	4
Total .....	18

SECOND YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 104—Fundamentals of Music Theory and Practice IV .....	3
MUSIC 109—Aural Skills III .....	1
MUSIC 204—Compositional Problems: Serial Techniques .....	2
MUSIC 206 <sup>2</sup> —Intermediate Composition .....	2
MUSIC 214—History of Music II .....	3
Music ensemble .....	1
French, German, or Italian .....	4
Total .....	18

THIRD YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
MUSIC 300—Counterpoint and Fugue .....	3
MUSIC 306 <sup>2</sup> —Composition .....	3
Music theory <sup>2</sup> .....	2
Music history <sup>3</sup> .....	3
Music ensemble .....	1
Electives .....	3
Total .....	17

THIRD YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 308 <sup>4</sup> —Analysis of Musical Form .....	3
MUSIC 306 <sup>2</sup> —Composition .....	3
Music theory <sup>2</sup> .....	2
Music history <sup>3</sup> .....	3
Music ensemble .....	1
Electives .....	3
Total .....	17

FOURTH YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
MUSIC 302—Musical Acoustics .....	3
MUSIC 306 <sup>2</sup> —Composition .....	3
Music theory <sup>2</sup> .....	2
Music ensemble .....	1
Electives .....	6
Total .....	17

FOURTH YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 306 <sup>2</sup> —Composition .....	3
MUSIC 315—Music of the Twentieth Century .....	3
Music theory <sup>2</sup> .....	2
Music ensemble .....	1
Electives .....	3
Total .....	14

<sup>1</sup>It is strongly recommended that students in this curriculum acquire a thorough practical knowledge of the piano as part of the applied music study.

<sup>2</sup>The music theory electives for the third and fourth years are to be chosen from MUSIC 301, 303, 304 (may be repeated to a maximum of 6 semester hours), 305, 307, 308 (may be repeated to a maximum of 6 semester hours in addition to MUSIC 308, section D or E), 320 (may be repeated to a maximum of 4 semester hours; senior standing in music required), 321, 322, 328, and 345. If the curricular emphasis is in music theory, the following will apply: juniors will substitute an additional 3 semester hours of MUSIC 308 for MUSIC 306; seniors will take MUSIC 229, 301, and 305, and substitute an additional 300-level music history course for MUSIC 306.

<sup>3</sup>To be chosen from MUSIC 310-314, 316, 317, 333-337.

<sup>4</sup>Must include either section D (music in the first half of the twentieth century) or section E (music since World War II).

History of Music Major

This major offers a broad cultural education that unites academic and musical training. It provides preparation for the graduate study required for research and teaching in musicology or ethnomusicology.

The fourth-year student, working with an adviser, must complete a satisfactory thesis as part of the requirements for the Bachelor of Music degree.

FIRST YEAR	
FIRST SEMESTER	HOURS
Applied music <sup>1</sup> .....	2
MUSIC 101—Fundamentals of Music Theory and Practice I .....	3
MUSIC 110—Basic Music Literature .....	2
Music ensemble .....	1
RHET 105 or 108, or SPCOM 111—Verbal Communication .....	3-4
Electives .....	4
Total .....	15-16

FIRST YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 102—Fundamentals of Music Theory and Practice II .....	3
MUSIC 107—Aural Skills I .....	1
Music ensemble .....	1
Electives, or SPCOM 112—Verbal Communication .....	2-3
Electives .....	5
Total .....	14-15

SECOND YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
MUSIC 103—Fundamentals of Music Theory and Practice III .....	3
MUSIC 108—Aural Skills II .....	1
MUSIC 213—History of Music I .....	3
Music ensemble .....	1
French or German <sup>2</sup> .....	4
Electives .....	2
Total .....	16

SECOND YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
MUSIC 104—Fundamentals of Music Theory and Practice IV .....	3
MUSIC 109—Aural Skills III .....	1
MUSIC 214—History of Music II .....	3
Music ensemble .....	1
French or German <sup>2</sup> .....	4
Electives .....	2
Total .....	16



THIRD YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
Music history <sup>3</sup> .....	3
MUSIC 300—Counterpoint and Fugue .....	3
Music ensemble .....	1
French or German <sup>2</sup> .....	4
Literature <sup>4</sup> .....	3
Electives .....	2
Total .....	18

FOURTH YEAR	
FIRST SEMESTER	HOURS
Applied music .....	2
Music theory <sup>5</sup> .....	3
Music history <sup>3</sup> .....	3
MUSIC 229—Thesis and Advanced Undergraduate Honors in Music .....	2
Music ensemble .....	1
History <sup>4</sup> .....	3
Electives .....	1-2
Total .....	15-16

THIRD YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
Music history <sup>4</sup> .....	3
MUSIC 308—Analysis of Musical Form .....	3
Music ensemble .....	1
French or German <sup>2</sup> .....	4
Literature <sup>4</sup> .....	3
Electives .....	2
Total .....	18

FOURTH YEAR	
SECOND SEMESTER	HOURS
Applied music .....	2
Music theory <sup>5</sup> .....	3
Music history <sup>3</sup> .....	3
MUSIC 229—Thesis and Advanced Undergraduate Honors in Music .....	2
Music ensemble .....	1
History <sup>4</sup> .....	3
Electives .....	1-2
Total .....	15-16

<sup>1</sup>It is strongly recommended that students in this curriculum acquire a thorough practical knowledge of the piano as part of the applied music study.

<sup>2</sup>Two years in one language are required except with special permission of the student's adviser.

<sup>3</sup>Third- and fourth-year music history courses are to be chosen from MUSIC 310-319, 333-337; however, a minimum of two courses must be chosen from MUSIC 310-315.

<sup>4</sup>May not be used to satisfy general education sequence.

<sup>5</sup>To be chosen from MUSIC 306 and 308.

**Voice Major**

The primary applied subject in this major includes both private lessons in voice and classes in vocal diction.

At least 8 semester hours each in the Italian, French, and German languages are required for the voice major. A student who has not completed at least two years of one of these languages in high school should begin study of languages during the first year.

Third- and fourth-year students must present satisfactory public junior and senior recitals as part of the requirements for the Bachelor of Music degree.

**FIRST YEAR****FIRST SEMESTER HOURS**

MUSIC 101—Fundamentals of Music Theory and Practice I .....	3
MUSIC 110—Basic Music Literature .....	2
MUSIC 166—English Diction, or MUSIC 167—Italian Diction .....	1
MUSIC 181—Voice .....	3
Music ensemble .....	1
Piano .....	2
RHET 105 or 108, or SPCOM 111—Verbal Communication .....	3-4
Total .....	15-16

**SECOND YEAR****FIRST SEMESTER HOURS**

MUSIC 103—Fundamentals of Music Theory and Practice III .....	3
MUSIC 108—Aural Skills II .....	1
MUSIC 168—German Diction, or MUSIC 169—French Diction .....	1
MUSIC 181—Voice .....	3
Music ensemble .....	1
Piano .....	2
MUSIC 213—History of Music I .....	3
Foreign language .....	4
Total .....	18

**THIRD YEAR****FIRST SEMESTER HOURS**

Music theory <sup>1</sup> .....	3
Music history <sup>2</sup> .....	3
MUSIC 366—Vocal Repertoire I .....	1
MUSIC 381—Voice .....	3
Music ensemble .....	1
Foreign language .....	4
Electives .....	2
Total .....	17

**FOURTH YEAR****FIRST SEMESTER HOURS**

MUSIC 330—Applied Music Pedagogy .....	2
MUSIC 381—Voice .....	3
Music ensemble .....	1
Electives .....	10
Total .....	16

**FIRST YEAR****SECOND SEMESTER HOURS**

MUSIC 102—Fundamentals of Music Theory and Practice II .....	3
MUSIC 107—Aural Skills I .....	1
MUSIC 166—English Diction, or MUSIC 167—Italian Diction .....	1
MUSIC 181—Voice .....	3
Music ensemble .....	1
Piano .....	2
Electives, or SPCOM 112—Verbal Communication .....	2-3
Electives .....	2
Total .....	15-16

**SECOND YEAR****SECOND SEMESTER HOURS**

MUSIC 104—Fundamentals of Music Theory and Practice IV .....	3
MUSIC 109—Aural Skills III .....	1
MUSIC 168—German Diction, or MUSIC 169—French Diction .....	1
MUSIC 181—Voice .....	3
Music ensemble .....	1
Piano .....	2
MUSIC 214—History of Music II .....	3
Foreign language .....	4
Total .....	18

**THIRD YEAR****SECOND SEMESTER HOURS**

Music theory <sup>1</sup> .....	3
Music history <sup>2</sup> .....	3
MUSIC 367—Vocal Repertoire II .....	1
MUSIC 381—Voice .....	3
Music ensemble .....	1
Foreign language .....	4
Electives .....	1
Total .....	16

**FOURTH YEAR****SECOND SEMESTER HOURS**

MUSIC 330—Applied Music Pedagogy .....	2
MUSIC 381—Voice .....	3
Music ensemble .....	1
Electives .....	9
Total .....	15

<sup>1</sup>The music theory requirement for the third year is to be satisfied by MUSIC 300 and 308, 3 semester hours each, or by MUSIC 308, 6 semester hours, with each semester devoted to a specifically listed topic.

<sup>2</sup>To be chosen from MUSIC 310-317, 333-337.



Open Studies Major

This major is available only to undergraduate students who have completed at least one semester in residence at the University of Illinois as a major in instrumental performance, history of music, composition-theory, voice, or music education at the University of Illinois. It provides flexibility for concentration in fields such as music of other cultures, jazz, or other areas; requires a minimum of 130 semester hours; and is patterned generally along the same lines as other undergraduate music majors.

Admission to this major is limited and is initiated by petition to a committee of three faculty members, the open studies adviser, and the associate dean of the College of Fine and Applied Arts. Additional information may be obtained from the Office of Undergraduate Studies, Music Building, Room 3030.

CURRICULUM IN MUSIC EDUCATION

For the Degree of Bachelor of Science<sup>1</sup>

A minimum of 130 hours of credit is required for graduation. This curriculum prepares its graduates for teaching music in grades kindergarten through twelve. For teacher education requirements applicable to all curricula, see pages 87 to 92.

Public performance is an integral part of the training of music educators, and all students, when sufficiently prepared, are required to participate in student recitals.

All students are required to enroll in at least one qualifying performance ensemble each semester in residence except in the semester during which they practice teach.

GENERAL EDUCATION COMPONENT	HOURS
Verbal communication (SPCOM 111 and 112, plus American or English literature; or RHET 105 or 108, a performance-based speech course, plus American or English literature) .....	9
Psychology .....	3
Approved natural sciences sequence .....	6
Approved humanities sequence .....	6
Approved social sciences sequence, including one course in American history and one course in American government .....	6
Health and/or physical education activity .....	3
Total .....	33
PROFESSIONAL AND/OR GENERAL ELECTIVES .....	13
BASIC MUSICIANSHIP COMPONENT	
Applied major .....	12
Music theory, sight-singing, and ear-training .....	15
Music history and literature .....	8
Ensembles .....	4
Total .....	39
EDUCATION COMPONENT	
History and/or philosophy of education .....	2
Child growth and development .....	3
Total .....	5
PROFESSIONAL COMPONENT .....	40
Students must select one of the following professional specializations: choral, elementary-general, instrumental, piano pedagogy, strings.	
EDUCATIONAL PRACTICE <sup>2</sup>	
Introduction to teaching .....	2
Techniques of teaching .....	3
Preclinical experiences .....	2
Student teaching <sup>3</sup> .....	8-16
Total .....	15-23

<sup>1</sup>Students are advised that general education requirements are being revised to comply with new state mandates. For more information, consult the certification officer (120 Education Building).  
<sup>2</sup>If public school certification is not desired, the student selects alternative courses totaling 13 semester hours in consultation with his or her adviser, 7 semester hours of which must be from the student's applied major, music theory, or music history.  
<sup>3</sup>Only 8 hours of student teaching apply toward the 130 hours needed for graduation.

## Department of Theatre

The curricular options in the Department of Theatre provide intensive and extensive preparation for the rigorous demands of a professional career in the theatre. A strong commitment to work in the theatre and a realistic understanding of its intellectual, aesthetic, and physical requirements is therefore necessary in students who enter the department's curricula.

Before acceptance in the undergraduate programs in theatre, applicants must participate in a preadmission workshop, which take place in the Krannert Center for the Performing Arts on five or more weekends of each year. The workshops afford the faculty an opportunity to explain the nature of the study programs, and to audition or interview candidates for admission. A student interested in studying acting prepares a four-minute audition, composed of two pieces from dramatic works, and, if a student is a singer, a song of no more than sixteen bars. Actors should also be prepared to participate in an improvisational session with the acting faculty during the course of the audition period. A student interested in design, management, directing, or technical theatre, should present a portfolio of previously accomplished work in theatrical production. The student interested in applied theatre performance studies is asked to prepare a one-page script complete with title, dialogue, and stage directions, and any other written work that gives an idea of interests and accomplishments, along with a portfolio of previous theatrical production work.

Three study curricula, or programs, are offered after the satisfactory completion of the first-year program required of all students. The programs in acting and theatre design, technology, and management are meant for those students who, in the judgment of the faculty, are ready to master those specialties in an intensive undergraduate professional training curriculum. The applied theatre performance studies curriculum is meant for students who intend to pursue training in directing, children's theatre, playwriting, theatre history, and criticism.

The Department of Theatre sponsors the Illinois Repertory Theatre, which is one of the resident producing organizations of the Krannert Center for the Performing Arts. Eight fully mounted productions are presented by the Illinois Repertory Theatre annually during the regular academic year. The theatres and workshops of the Krannert Center serve as laboratories for theatre students, who have the opportunity to learn and to work alongside an outstanding staff of resident theatre professionals and visiting artists, preparing performances in theatre, opera, dance, and Kabuki.

## CURRICULUM IN THEATRE

### For the Degree of Bachelor of Fine Arts in Theatre

A minimum of 128 hours of credit is required for the degree.

### First-Year Program for All Theatre Curricula

FIRST YEAR		FIRST YEAR	
FIRST SEMESTER	HOURS	SECOND SEMESTER	HOURS
THEAT 106—Basic Theatre Practice I .....		THEAT 107—Basic Theatre Practice II	
Section A: Skills .....	2	Section A: Skills .....	2
Section B: Acting .....	2	Section B: Acting .....	2
Section C: Scenecraft .....	2	Section C: Scenecraft .....	2
THEAT 108—Basic Practice Laboratory .....	2	THEAT 108—Basic Practice Laboratory .....	2
THEAT 109—Dramatic Form/Content .....	3	THEAT 110—Literature of Modern Theatre .....	3
RHET 105 or 108—Composition .....	4	General education sequence .....	6
General education sequence .....	3	Total .....	17
Total .....	18		

A student who satisfactorily completes this program will, in consultation with the theatre faculty, determine the appropriate registration in one of the three curricula discussed below.

### Applied Theatre Curriculum

*NOTE:* Students and perspective students of the applied theatre program should be advised that revisions in this program are being planned. Students should consult their advisers regarding the status of these revisions before registering.



A student wishing to prepare for advanced professional training in directing, playwriting, or children’s theatre (Option 1), or general studies or history and criticism (Option 2), will study in this curriculum after satisfactorily completing the first-year program. The student must be admitted to the curriculum by the faculty director of a particular option and file with the department a program of study that shows how he or she will meet the general and specific requirements of the option. Requirements include residence at the University during the last 60 hours of the program, and enrollment for at least 6 hours in department courses during each semester of residence. The specific course requirements of each option must be completed (see below). Students in both options will complete satisfactorily the production assignments made by the Illinois Repertory Theatre.

GENERAL REQUIREMENTS	HOURS
Rhetoric .....	4
General education sequences	
Natural sciences sequence .....	6
Humanities sequence .....	6
Social sciences sequence .....	6
General electives .....	16
General and/or professional electives .....	35-37
Total .....	73-75

REQUIRED THEATRE CREDITS	HOURS
For all options: Specified first-year theatre courses (see first-year program) .....	22

Option 1: Directing, Playwriting, or Children’s Theatre	
THEAT 175—Improvisation in Acting .....	4
THEAT 176—Relationships in Acting .....	4
THEAT 199—Playwriting .....	3
THEAT 281—Directing: Script Preparation .....	3
THEAT 332—Stage Management .....	4
THEAT 353—Creative Dramatics for Children, or THEAT 354—Theatre for the Child Audience .....	3
THEAT 361, 362—Development of Theatrical Forms I, II .....	8
THEAT 381—Directing: Rehearsal, or THEAT 375—Acting the Period Play (twice) .....	3
Total .....	32

Option 2: General Studies, or History and Criticism	
THEAT 175—Improvisations in Acting .....	4
THEAT 176—Relationships in Acting .....	4
THEAT 199—Playwriting .....	3
THEAT 281—Directing: Script Preparation .....	3
THEAT 300—Practicum II .....	3
THEAT 353—Creative Dramatics for Children, or THEAT 354—Theatre for the Child Audience .....	3
THEAT 361 and 362—Development of Theatrical Forms I and II .....	8
THEAT 291 and 292—Individual Topics .....	4
Total .....	32

NOTE: Total hours in theatre courses can vary with faculty approval since certain offerings provide variable credit (e.g., practicum and internship).

Professional Studio in Acting

Students planning for careers as professional actors are selected by audition for the professional studio in acting after successful completion of the first-year program for all theatre curricula, or its equivalent. Criteria for selection include potential for professional-caliber performance, commitment to theatre, the necessary discipline for intensive study, and agreement to complete the three-year curriculum.

Each semester the acting studio member will be required to complete satisfactorily production crew assignments with the Illinois Repertory Theatre. It is assumed that the student will audition for Illinois Repertory Theatre productions and play one role each semester if cast. The student must be cast in at least one production each year to continue in the professional studio in acting.

GENERAL REQUIREMENTS	HOURS
Rhetoric .....	4
General education sequences	
Natural sciences sequence .....	6
Humanities sequence .....	6

Social sciences sequence .....	6
General electives .....	12
General and/or professional electives .....	16
Total .....	50

<b>REQUIRED THEATRE CREDITS</b>	<b>HOURS</b>
Specified first-year theatre courses (see first-year program) .....	22
THEAT 151—Acting Studio I: Improvisation	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 152—Acting Studio II: One Act Plays	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 253—Acting Studio III: Advanced Scene Study	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 254—Acting Studio IV: Musical Theatre	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 255—Acting Studio V: Shakespeare	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 256—Acting Studio VI: Acting for the Camera	
Section A: Dynamics .....	1
Section B: Voice and Speech .....	2
Section C: Movement .....	2
Section D: Acting .....	3
THEAT 361 and 362—Development of Theatrical Forms I and II .....	8
Total .....	78

**Division of Design, Technology, and Management**

Students planning careers in professional theatre design, technology, or management are selected for the curriculum in design, technology, and management at the sophomore level. To be accepted into this curriculum, a candidate must have completed the first-year program or its equivalent. Criteria for selection to, and continuance in, this curriculum include significant artistic progress, potential for professional-caliber work, commitment to theatre, and the necessary discipline for intensive study and practice. In each semester, the student will be required to complete satisfactorily production assignments on productions originating at the Krannert Center.

<b>GENERAL REQUIREMENTS</b>	<b>HOURS</b>
Rhetoric .....	4
General education sequences	
Natural sciences sequence .....	6
Humanities sequence .....	6
Social sciences sequence .....	6
General electives .....	9
General and/or professional electives (ARTGP 121 and 122 recommended) .....	19-25
Total .....	50-56

<b>REQUIRED THEATRE CREDITS</b>	
For all options:	
Specified first-year theatre courses (see first-year program) .....	22
THEAT 361 and 362—Development of Theatrical Forms I and II .....	8



Scene Design Option

THEAT 225, 226, and 325-328—Scene Design I-VI ..... 22

THEAT 223—Stage Mechanics I ..... 4

THEAT 231—Stage Lighting Practice ..... 3

THEAT 336—History of Scene Design ..... 3

THEAT 337—Scene Painting Techniques ..... 2

THEAT 338—Rendering Techniques for the Stage ..... 2

THEAT 339—Property Design ..... 2

THEAT 345 and 346—Costume History for the Stage I and II ..... 8

Total ..... 46

Costume Design and Construction Option

THEAT 199—Undergraduate Open Seminar: Costume Construction ..... 4

THEAT 225—Scene Design I or THEAT 322—Scene Design for Nonmajors ..... 3

THEAT 242—Introduction to Costume Patterning ..... 3

THEAT 231—Stage Lighting Practice ..... 3

THEAT 336—History of Scene Design ..... 3

THEAT 342—Costume Patterning ..... 3

THEAT 345 and 346—Costume History for the Stage I and II ..... 8

THEAT 347—Costume Rendering ..... 3

THEAT 227 and 228—Senior Projects in Design I and II ..... 12

Total ..... 42

Theatre Technology and Lighting Option

THEAT 210—Stage Electronics ..... 3

THEAT 223 and 224—Stage Mechanics I and II ..... 8

THEAT 225 and 226—Scene Design I and II ..... 6

THEAT 230—Technical Direction ..... 2

THEAT 231—Stage Lighting Practice ..... 3

THEAT 232—Lighting Design for the Stage ..... 3

THEAT 233—Stage Drafting I ..... 4

THEAT 310—Theatre Planning and Programming ..... 3

THEAT 323 and 324—Stage Mechanics III and IV ..... 4

THEAT 331—Theatre Sound ..... 3

THEAT 332—Stage Management ..... 4

THEAT 337—Scene Painting ..... 2

THEAT 340—Lighting Design for Dance ..... 3

Total ..... 48

Stage and Theatre Management Option

THEAT 199—Undergraduate Open Seminar: Management ..... 5

THEAT 230—Technical Direction ..... 2

THEAT 231—Stage Lighting Practice ..... 3

THEAT 281—Direction: Script Preparation ..... 3

THEAT 300—Practicum II ..... 8

THEAT 322—Scene Design for Nonmajors ..... 3

Theater 332—Stage Management ..... 4

THEAT 345 and 346—Costume History for the Stage I and II ..... 8

THEAT 355—History and Development of American Musical Theatre ..... 3

THEAT 372—Introduction to Theatre Management ..... 3

Total ..... 42

Department of Urban and Regional Planning

The Department of Urban and Regional Planning offers a program leading to the degree of Bachelor of Arts in Urban Planning. Urban planning gives practical expression to human values. Its aim is to sustain and enhance the quality of life in cities and regions, to create the good society. Therefore, in addition to special technical skills, each student is helped to acquire a broad liberal education that leads to an understanding of the natural and social environments, their problems, and their potentialities for enriching human life. Pathways in undergraduate planning education lead to diverse careers through professional employment or graduate study in urban planning or related professions. The degree is accredited by the Planning Accreditation Board.

For freshman admission to the Department of Urban and Regional Planning, a student must submit a statement of professional interest. A transfer student must have completed 30 or more semester hours of acceptable undergraduate college work with an earned grade-point average

of at least 3.5 (A = 5.0). Transfer applicants not meeting these requirements will be considered in special cases.

The department's administrative offices are at 907<sup>1/2</sup> West Nevada Street, Urbana. Classrooms and workshop space are located at 907, 907<sup>1/2</sup>, 909, and 1001 West Nevada Street. The City Planning and Landscape Architecture Library is in Mumford Hall.

The Department of Urban and Regional Planning also offers a program of graduate studies leading to the Master of Urban Planning degree, dual degree programs with the Master of Architecture and the Juris Doctor degrees, and the Doctor of Philosophy degree in regional planning. The Bureau of Urban and Regional Planning Research, a unit within the department, provides a vehicle for the involvement of both faculty and students in a wide range of research projects, continuing education programs, community service activities, and publication projects.

CURRICULUM IN URBAN AND REGIONAL PLANNING

For the Degree of Bachelor of Arts in Urban Planning

A total of 120 hours is required for this degree.

FIRST AND SECOND YEARS

Minimum of 60 hours, consisting of the following:

RHET 105 or equivalent

A two-course sequence (6 semester hours minimum) each in the humanities, natural sciences, and social sciences

An introductory course each in economics, sociology, and political science

Appropriate electives with no more than 20 semester hours in any one discipline, including the above

UP 101—Planning of Cities and Regions (3 hours)

UP 260—Urban Social Problems and Planning, or UP 240—Land Use Planning Process (3 hours)

Quantitative methods<sup>1</sup> (3 hours)

THIRD YEAR

FIRST SEMESTER	HOURS
UP 316—Planning Analysis .....	3
Urban planning elective <sup>2</sup> .....	6
Urban studies elective <sup>3</sup> .....	3
General elective <sup>4</sup> .....	3
Total .....	15

FOURTH YEAR

FIRST SEMESTER	HOURS
UP 301—Development of American Planning Thought, or UP 304—Urban Planning Theory .....	3
UP 308—Planning Law .....	3
Urban studies elective <sup>3</sup> .....	3
General electives <sup>4</sup> .....	6
Total .....	15

THIRD YEAR

SECOND SEMESTER	HOURS
UP 247—Planning Workshop I .....	6
Urban planning elective <sup>2</sup> .....	3
Urban studies elective <sup>3</sup> .....	3
General elective <sup>4</sup> .....	3
Total .....	15

FOURTH YEAR

SECOND SEMESTER	HOURS
Urban Planning Workshop <sup>5</sup> or Independent Study .....	6
Urban planning elective <sup>2</sup> .....	3
General electives <sup>4</sup> .....	6
Total .....	15

<sup>1</sup>SOC 185 or other statistics course, subject to approval of department adviser.

<sup>2</sup>A total of 12 hours of elective courses within the Department of Urban and Regional Planning are to be selected from, but not limited to, the list below:

UP 199—Undergraduate Open Seminar .....	1-5
UP 202—Contemporary Planning Practice .....	3
UP 205—Ecological Systems in Planning .....	3
UP 247—Planning Workshop I .....	6
UP 260—Urban Social Problems and Planning .....	3
UP 290—Planning Internship .....	0-6
UP 297—Special Problems .....	2-6
UP 303—Urban Structure and Functions .....	3
UP 305—Environmental Planning in a Watershed Context .....	3
UP 308—Law and Planning Implementation .....	3
UP 312—Graphics and Communications for Planners .....	3
UP 316—Planning Analysis .....	4
UP 320—Planning for Historic Preservation .....	3



UP 326—Urban Design and Planning Methods ..... 3

UP 327—Preservation Planning Workshop ..... 6

UP 330—Urban Transportation Planning ..... 3

UP 331—Regional Transportation Planning ..... 3

UP 341—Land Resource Evaluation ..... 3

UP 342—Seminar on Environmental Policy and Law ..... 3

UP 345—Urban Economic Development and Fiscal Packaging ..... 3

UP 348—Environmental Planning Workshop ..... 4-6

UP 349—Environmental Management and Planning Simulation ..... 3

UP 365—Social Planning Evaluation and Research ..... 3

UP 374—Neighborhood Planning ..... 3

UP 375—Regional Environmental Management Simulation ..... 2

UP 394—Special Topics in Urban and Regional Planning ..... 3

<sup>3</sup>Urban studies elective courses totaling 9 hours are required, in addition to introductory courses listed under the first two years, with approval of departmental adviser. (Suggested urban studies courses include, but are not limited to, ARCH 317, 318, 323, 379; ECON 360; FIN 264, 365; GEOG 204, 277, 373, 383-385; POL S 250, 305, 306, 353, 361; SOC 223, 225, 275, 276. Additional urban planning courses in excess of the 39 hours required may be applied toward this requirement.

<sup>4</sup>General electives as needed to complete the total hours required are to be selected from the approved college list. Excess urban planning and urban studies courses may be applied toward this requirement.

<sup>5</sup>Urban planning workshop classes include UP 327, 347, and 348.

**TEACHER EDUCATION MINOR IN URBAN STUDIES\***

Students electing the urban studies minor must consult with the head of the Department of Urban and Regional Planning.

A minimum of 21 hours of course work in urban and regional planning and urban studies (approved urban studies courses listed above) is required for the completion of this minor. Two courses must be selected from the following: UP 301, 304, 360 (or equivalents if these courses are unavailable in a given year).

---

\*This minor does not lead to endorsements in an additional teaching field.

# College of Liberal Arts and Sciences

270 Lincoln Hall, 702 South Wright Street, Urbana, IL 61801

Degree Programs Available .....	240
Teacher Education Curricula (Secondary) .....	241
Admission Requirements .....	242
Advising .....	242
Honors Programs .....	243
Combined Degree Programs .....	245
Study Abroad .....	245
Opportunities for Multidisciplinary Study .....	247
Curricula .....	249
Curriculum in Sciences and Letters: General Requirements .....	249
Sciences and Letters Majors .....	254
Minors .....	293
Interdisciplinary Minors .....	297
Specialized Curricula .....	298
Teacher Education Curricula .....	304
Teacher Education Minors .....	318
Joint Degree Programs .....	323
Preprofessional Health Programs .....	324

The College of Liberal Arts and Sciences (LAS) has four missions: scholarly inquiry and the generation of knowledge, preparation of individuals for an array of careers and professions, service to the public, and the provision of the intellectual core of the University. The college shares the first three missions with professional schools and other colleges on this campus, but the last mission is uniquely the responsibility of the College of Liberal Arts and Sciences. Fulfillment of that responsibility yields a diversified college uniquely valuable in contributing to the development of broadly educated individuals committed to or characterized by open inquiry, critical thinking, effective communication, and responsiveness to the needs of individuals and society.

The College of Liberal Arts and Sciences is the largest individual college within a university setting in the state of Illinois. The college offers seventy undergraduate and ninety-six graduate degree-granting programs and enrolls more than 40 percent of the undergraduates on the Urbana-Champaign campus. The college serves the entire campus by providing a full range of required general education and service courses in basic disciplines.

Students in the college are expected to understand the content and develop skills in areas that reflect the overall purpose of the college: fluency and facility in English; literacy in at least one foreign language; broad exposure to a number of different disciplines; and intensive study in one discipline (or an interdisciplinary program). The student has a wide choice of courses to satisfy these requirements; however, ultimately he or she must plan a diverse and intensive program of study, prepare for an occupational/professional and intellectual future, and develop that clarity and range of mind that is the goal of educated people.

## DEGREE PROGRAMS AVAILABLE

The following degree programs are available in the College of Liberal Arts and Sciences:

**Sciences and Letters Curriculum.** The sciences and letters curriculum comprises all of the traditional programs in the liberal arts and sciences. The curriculum requires in-depth study in one major as well as substantial experience in a number of other areas. A description of the components of the curriculum may be found beginning on page 249. The majors are:

- Actuarial science
- Anthropology



Art history  
 Asian studies  
 Astronomy  
 Chemistry  
 Classics (including Greek and Latin)  
 Comparative literature  
 Economics  
 English  
 Finance  
 French  
 Geography  
 Geology  
 Germanic languages and literature (including Scandinavian studies)  
 History  
 Humanities—Options in American civilization, cinema studies, history and philosophy of science, medieval civilization, Renaissance studies  
 Individual Plans of Study (IPS)  
 Italian  
 Latin American studies  
 Life sciences—Options in bioengineering; biophysics; cell and structural biology; ecology, ethology, and evolution; entomology; general biology; honors biology; microbiology; physiology; plant biology  
 Linguistics  
 Mathematics  
 Mathematics and computer science  
 Music  
 Philosophy  
 Physics  
 Political science  
 Portuguese  
 Psychology  
 Religious studies  
 Rhetoric  
 Russian  
 Russian and East European studies  
 Sociology  
 Spanish  
 Speech and hearing science  
 Speech communication  
 Statistics  
 Statistics and computer science

**Specialized Curricula.** Specialized curricula are prescriptive programs that are offered as preprofessional study or preparation for graduate pursuits. These curricula include the teacher education curricula that lead to bachelor's degrees and state certificates for teaching. Although many of the general college requirements are similar to those in the sciences and letters majors, there are slight variations among them. The curricula are:

Biochemistry  
 Chemical engineering  
 Chemistry  
 Geology and geophysics  
 Physics  
 Speech and hearing science (B.S.)

## TEACHER EDUCATION CURRICULA (SECONDARY)

Preparation for teaching at the secondary level is available in LAS through the following curricula:

Biology  
 Chemistry  
 Combined sciences and letters/Teaching of mathematics  
 Computer science  
 Earth science  
 English  
 French  
 German  
 Latin  
 Mathematics  
 Physics

Russian  
Social studies  
Spanish  
Speech

### Combined Degree Programs

Students are able to combine study of an LAS discipline with other disciplines through the following three programs: LAS/Commerce, LAS/Engineering, and the IPS major in the sciences and letters curriculum.

### Transfer Between Programs

Students should be advised that they may have to satisfy specific GPA requirements for transfer into most specialized curricula and some majors. Contact an adviser or the LAS College Office (270 Lincoln Hall) for specific information.

## ADMISSION REQUIREMENTS

The general admission requirements and procedures of the College of Liberal Arts and Sciences are outlined in the admission section (see page 9). These requirements were established to enable students admitted here to make the most effective use of the facilities of the University. The requirements should ensure that entering students have the capability of completing a degree program successfully.

While the admission patterns or high school subjects required for admission are *necessary* for the student to be able to compete successfully at this University, these requirements are minimal. Several other specific recommendations for high school subjects are listed below. The college urges prospective freshmen to seek as broad and as rigorous a preparation as possible in high school. In particular, students should continue electing academic subjects throughout the senior year.

**English:** The college strongly recommends that students complete four full years of English in high school.

**Mathematics:** Although mathematics is not required in all degree programs in the college, many of the programs do require some mathematics. A minimum preparation is two years of algebra and one year of geometry; a fourth year of college preparatory mathematics is strongly encouraged. A solid foundation in mathematics will assist students in taking full advantage of educational opportunities at the University.

Beginning with the fall 1989 freshman class, students may not use credit in algebra (sometimes called "college algebra") toward LAS degrees; specifically, students may not use credit in MATH 112 or its equivalent toward LAS degrees. Please refer to the *LAS Student Handbook* for details.

**Science:** Some knowledge of science is necessary in our technology-oriented society. Students should elect at least two years of laboratory science in high school.

**Foreign language:** Because successful completion of four years of a single language in secondary school will satisfy the college foreign language degree requirement, students should include as much foreign language as possible in their secondary school programs. Those students who have not had some foreign language during the junior and senior years of high school may find it helpful to review the language before taking the placement examination after being admitted to the college.

## ADVISING

Academic advising is a critical resource for students in developing a program of study. Especially on a large campus, a continuing, committed association with a faculty member can be a valuable and rewarding part of the student's educational experience. Advisers are available to aid students in choosing majors, planning for career choices, and selecting courses for each semester. All students in degree programs in the college have academic advisers available in their major departments. In addition, the assistant and associate deans in the college assist students in handling a variety of problems and questions.

In order to simplify minor changes in course selections, a student who has successfully completed at least 30 semester hours of course work and who understands the requirements of the college and the University may choose courses without obtaining approval from an



academic adviser unless informed otherwise by the college. A student does need to obtain approval from an adviser for a number of arrangements, including a formal plan of study for the major and the election of the credit-no credit grading option. A student may be requested by the college office to obtain approval from an adviser and/or the dean for all course changes under certain circumstances. It is very important for advanced students to confer with advisers on a regular basis; therefore, the college encourages all students to consult with their academic advisers at least once each year.

One particular resource for a student in the college who has not decided on a plan of study is the general curriculum. The general curriculum is an advising center for students who want to investigate a variety of subjects before selecting their majors or who have decided on programs that require transfer at the sophomore or junior level. The general curriculum is not a degree program and does not serve as a formal program of study. Entering freshmen and continuing students with less than 45 semester hours of credit may elect to enter the general curriculum and may remain in the program until they complete 56 academic semester hours. The office provides individual advising; group orientation sessions; and printed materials describing majors, curricula, and many career opportunities. Students in the general curriculum are LAS students and must follow LAS policies and regulations. The general curriculum office serves as the college office for students in the program.

Another special resource in the college is qualified advising for students who are interested in law school. An assistant dean in the college office (270 Lincoln Hall) counsels students who have declared a prelaw interest. All such students are encouraged to consult the prelaw adviser. Students preparing for law school may elect *any* major; they need not consider themselves restricted in the choice of degree programs. To assist students planning prelaw programs, a faculty committee in the college has prepared a handbook for students on prelaw advising. For further information, contact the prelaw adviser at 270 Lincoln Hall.

## HONORS PROGRAMS

### Dean's List

Each semester, students are recognized by the college for placement on the Dean's List. Those students are eligible who meet the following criteria and are in the top 20 percent of their classes. Students must carry at least nine hours of traditionally graded courses to be eligible. Course work graded credit-no credit or satisfactory-unsatisfactory is excluded from the nine hour minimum, as is course work taken for graduate credit. Students with work graded excused or deferred are not considered for the Dean's List until grades have been submitted for that work. These students should notify the honors dean when such work has been completed if they expect to be placed on the Dean's List.

### James Scholar Program

The official honors program in the College of Liberal Arts and Sciences is called the Edmund J. James Scholar Program. This program allows students with exceptional ability to pursue rigorous academic courses of study and provides the opportunity for those students to meet with faculty members who are particularly interested in honors programs. There are honors advisers available in the respective departments and an honors dean in the college office. James Scholars register in some special honors courses, sections, seminars, and colloquia; they may also arrange individualized honors credit agreements for specific courses. James Scholars have open access to the University Library stacks (ordinarily open only to graduate students and the faculty); such access to library stacks is particularly helpful for students involved in independent study and/or undergraduate research projects. James Scholars also have their program requests processed early to minimize conflicts in scheduling honors courses.

Any qualified LAS student may become a James Scholar Designate or Nominee. Entering freshmen who are in the top 15 percent of the admitted class are invited immediately into the program as James Scholar Designates. Each continuing student in the college must maintain a cumulative grade-point average of 4.5 and must complete two honors courses during the academic year. In order to remain in the program as James Scholar Nominees, students must satisfy the requirements for continuing students. Official certification of James Scholar standing is made at the end of the academic year (upon completion of these requirements).

Further information about the James Scholar program is available from the college office, 270 Lincoln Hall.

## Rogers Merit Scholar Program

The College of Liberal Arts and Sciences has established the Robert W. Rogers Merit Scholarship program for highly qualified freshmen. A freshman chosen as a Robert W. Rogers Scholar may enroll in any curriculum in the college and is awarded \$1,000 for the year; the award may be renewed for the sophomore year if the student maintains at least a 4.5 (A = 5.0) grade-point average and continues in the college. After an initial review of all admitted freshmen is made, those with the highest qualifications are invited to apply. The selection of a Rogers Scholar is made by a faculty panel and based on exceptional scholastic achievement, high performance on either the ACT or SAT examination, and evidence of leadership in the school or community. No more than twelve new awards are made each year.

## Cohn Scholar Program

The Cohn Scholar Program provides intellectual and financial support for a small group of highly qualified freshmen majoring in the humanities. Cohn Scholars participate in a special freshman-year program. Typical activities during the year include tutorials, seminars, and orientation in the use of University facilities. Each student is given opportunities for meeting with both faculty members and students with similar interests; each is also assigned a special honors adviser for the program and for academic advising. A student is selected for the program by a faculty committee on the basis of an application, high school class rank, and performance in a competitive entrance examination (ACT or SAT). Inquiries should be addressed to the Office of the Dean, College of Liberal Arts and Sciences, 294 Lincoln Hall, Urbana, IL 61801.

## Honors at Graduation

College honors at graduation are awarded on the basis of academic excellence and satisfaction of one of the following: (1) successful completion of 25 hours of honors courses (or of work on honors learning agreements); (2) successful completion of 35 hours of 300-level course work; or (3) earning departmental distinction. Provided that one of the requirements above is satisfied, the award of college honors is made according to the following ranges: *cum laude*, if the college grade-point average places a student in the top 12 percent of the graduating class but not in the top 7 percent; *magna cum laude*, if the college grade-point average places a student in the top 7 percent of the graduating class but not in the top 3 percent; and *summa cum laude*, if the college grade-point average places a student in the top 3 percent of the graduating class.

## Departmental Distinction

Students who have shown exceptional competence in one or more areas of study may earn distinction in their major(s) or curricula. Criteria for awarding distinction are established by the departments. Students interested in working for distinction should consult their honors adviser early in the junior year. Specific information about requirements is available from the departmental and curriculum advisers. Generally, in addition to meeting the scholastic requirements and the minimum requirements for a major, a student graduating with departmental distinction must satisfy at least one of the following requirements: (1) presentation of an acceptable thesis; (2) satisfactory performance on a comprehensive examination prepared by the major department; or (3) completion of a special course of study of at least four semester hours approved by the major department.

A student who has completed a curriculum in teacher education and has shown superior ability in that area may be recommended for distinction in the teacher education program. Information about requirements may be obtained from the adviser in the area of specialization.

## Phi Beta Kappa

Invitations for membership into Phi Beta Kappa, the nation's oldest honor society, are sent to outstanding students in Liberal Arts and Sciences each April. Eligibility requires rank in the top 10 percent of seniors in LAS, as well as a minimum number of graded hours and appropriate course distribution. Precise criteria and detailed information may be obtained from the chapter secretary, Dr. Susan Gonzo, Office of the Vice Chancellor for Academic Affairs, 2nd floor Swanlund Building, University of Illinois, 601 East John Street, Champaign, IL 61820, (217) 333-8159.



## Awards

There are a number of prizes and awards available to outstanding students in certain areas of the college. A department will generally notify the student of the possibility of such an award; however, an interested student may obtain a current list of the awards available from the college office, 270 Lincoln Hall.

## COMBINED DEGREE PROGRAMS

### LAS/Engineering

For a number of years, the Colleges of Liberal Arts and Sciences and Engineering have jointly sponsored a five-year program leading to a B.A. or B.S. degree in liberal arts and sciences and a B.S. degree in a field of engineering. The program allows motivated students to obtain professional engineering education combined with a broad liberal arts background. The program, not intended to eliminate any graduation requirements of either college, requires students to complete all degree requirements of both colleges.

Freshmen normally apply for entrance to the program through the College of Engineering, but students who have applied to and been accepted by the College of Liberal Arts and Sciences may be able to enter the program. All students must meet the entrance requirements of both colleges. In addition, they may be required to meet the intercollegiate transfer requirements of both colleges. For further information about the program see page 177 and consult your college office.

### LAS/Commerce

The College of Liberal Arts and Sciences together with the College of Commerce and Business Administration offers two joint-degree programs that lead to the degrees of B.A. or B.S. in liberal arts and sciences and M.A.S. or M.B.A. Each program takes five years to complete. These programs allow students to complete master's programs in accounting or business administration while they provide students with the broad opportunities unique to a liberal arts program. For further description, see page 323. Students interested in these opportunities should contact the College of Liberal Arts and Sciences, 270 Lincoln Hall for additional information and advising.

## STUDY ABROAD

Many students in the College of Liberal Arts and Sciences find that they can benefit from a semester or a year of study in a foreign country. To facilitate such study abroad, the College of Liberal Arts and Sciences sponsors a number of special study abroad programs and provides for student participation in these and other programs. There are three general categories of programs: (1) a program enabling students to study at approved foreign institutions of their choice; (2) special study abroad programs sponsored by units of the College of Liberal Arts and Sciences; and (3) participation in cooperative programs sponsored by other universities or groups of universities.

### LAS Study Abroad

The College of Liberal Arts and Sciences supports the Study Abroad Office to aid students who plan to study at approved foreign institutions or in programs of their choice other than those offered by departments within the college itself. The option is open not only to students in LAS, but also to students in other colleges within the University. A student's program for study abroad must have prior approval from the major department, the student's college, and the Study Abroad Office. Final determination of appropriate credit is made upon the student's completion of the work *after* returning to campus.

Students register in LAS 299 for 0 hours per semester and may earn a maximum of 30 semester hours per academic year or 36 semester hours for the academic year, including summer study.

Interested students should contact the Study Abroad Office, University of Illinois at Urbana-Champaign, 306 Coble Hall, 801 South Wright Street, Champaign, IL 61820.

## **French: Year Abroad Study Program in Paris, France**

Study abroad at one of three programs in Paris is available through the College of Liberal Arts and Sciences and the Department of French. The nine-month program emphasizes the study of French language, literature, and civilization. Options include working *au pair*, teaching English in a French high school, and studying Business French at the Institut Catholique. A student does not need to be a French major to participate. The minimum requirements for participation are junior standing (or higher), a 3.5 (A = 5.0) University grade-point average, and a 3.5 grade-point average in French. Before leaving, students must complete three courses at the 200 level, including FR 207 and either FR 209 or FR 210.

Interested students should contact the Illinois Program in Paris, Department of French, University of Illinois at Urbana-Champaign, 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801.

## **French: Summer Study in Quebec**

The University of Illinois participates in a six-week summer French program at Université Laval in Quebec, a program sponsored by the Committee on Institutional Cooperation (CIC). All students take courses to improve language skills. More advanced students may also take courses in French Canadian Literature and Civilization. Students earn six hours credit during the summer term. Participants should have at least one year of college French or the equivalent, and an overall grade-point average of 4.0 or higher (A = 5.0).

Interested students can obtain further information from the study abroad director, Department of French, University of Illinois at Urbana-Champaign, 2090 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801.

## **German: Year Abroad Program in Austria**

In cooperation with the Department of Germanic Languages and Literature, the College of Liberal Arts and Sciences sponsors a year abroad program in Vienna, Austria. In addition to courses in language, literature and civilization taught by the program director, and commercial subjects taught at the Economics University in Vienna where the program is housed, students may elect courses at other university-level institutions in Vienna. Participants in the program should have at least a 3.75 (A = 5.0) University grade-point average, including a 4.0 grade-point average in German courses. Students accepted in the program should have language proficiency beyond the intermediate level (GER 211 or equivalent), although students need not be German majors.

Interested students should contact the Austria-Illinois Exchange Program, Department of Germanic Languages and Literatures, University of Illinois at Urbana-Champaign, 3072 Foreign Language Building, 707 South Mathews Avenue, Urbana, IL 61801.

## **Japanese: Year Abroad Program in Japan**

In cooperation with several other universities, the University of Illinois at Urbana-Champaign offers a year abroad program in Japan at the Konan-Illinois Center on the campus of Konan University in Kobe, located in western Japan near Osaka and Kyoto. Students participating in the program receive an intensive introduction to Japanese language, culture, and society by combining classroom and independent study, home stay with a Japanese family, and opportunities for field trips and personal travel. The program is open to any student in good standing at the University. No prior knowledge of Japanese is required. Students from other colleges and universities as well as beginning graduate students may participate in the program.

Interested students should contact the Konan-Illinois Program, Center for East Asian and Pacific Studies, 1208 West California Avenue, Urbana, IL 61801.

## **Spanish: Year Abroad Program in Spain**

In cooperation with the Department of Spanish, Italian, and Portuguese, the College of Liberal Arts and Sciences sponsors a year abroad program in Spain. After orientation sessions at Barcelona and Madrid, students in the program study for two semesters at the University of Barcelona. Participants in the program should have at least 3.5 (A = 5.0) University grade-point averages and at least 4.0 grade-point averages in Spanish courses. Students accepted into the program must have completed the intermediate level in Spanish (SPAN 104 or its equivalent). At least one year of study in language and literature beyond the intermediate level is desirable.



for students to benefit fully from the program. The program is designed for juniors majoring in Spanish or the teaching of Spanish; however, seniors and well-qualified sophomores majoring in Spanish and students studying in other areas may apply.

Interested students should contact the Department of Spanish, Italian, and Portuguese, University of Illinois at Urbana-Champaign, 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801.

## **Cooperative Programs Abroad**

**Russian Language Study at Leningrad State University.** The University of Illinois participates in the cooperative Russian language program at Leningrad State University under the auspices of the Council on International Educational Exchange. The program consists of one or two semesters of study or one summer session. Students in the program study Russian language and literature, and classes are conducted in Russian by the university faculty. All students must have facility in the language, but the program is not limited to students majoring in Russian.

Interested students should obtain details and applications from the Department of Slavic Languages and Literatures, University of Illinois at Urbana-Champaign, 3092 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801.

**Spanish Summer Program in Mexico.** The University of Illinois participates in the eight-week summer program of Spanish at the Universidad Guanajuato, sponsored by the Committee on Institutional Cooperation. Students should be in good academic standing and have at least a 4.0 (A = 5.0) grade-point average in Spanish. Students accepted in the program should have competence in Spanish equivalent to the third year of college study.

Interested students should obtain further information from the Department of Spanish, Italian, and Portuguese, University of Illinois at Urbana-Champaign, 4080 Foreign Languages Building, 707 South Mathews Avenue, Urbana, IL 61801.

## **OPPORTUNITIES FOR MULTIDISCIPLINARY STUDY**

A number of opportunities for multidisciplinary study area are available in the College of Liberal Arts and Sciences, and a number of units in the college are devoted to the multidisciplinary study of various areas, cultures, and subjects. Some of these units sponsor interdisciplinary majors; others do not have formal majors, but have arrangements for faculty members to assist students in planning programs appropriate to individual needs. Also, some units sponsor interdisciplinary minors that may be completed in conjunction with a sciences and letters curriculum degree program (i.e., a degree program with a traditional major in LAS). For details, see below.

### **Multidisciplinary Majors**

There are three area studies programs with majors in the college: East Asian and Pacific Studies, Latin American and Caribbean Studies, and Russian and East European Studies. Descriptions of these majors may be found in the section on degree requirements for majors. (See the section beginning on page 249.)

### **Informal Multidisciplinary Opportunities**

The following units do not have formal degree programs; however, the units have or are developing interdisciplinary minors, assist students interested in those subjects, and coordinate research efforts in those areas.

### **CENTER FOR AFRICAN STUDIES**

The Center for African Studies is concerned with all aspects of African affairs and cultures. The center sponsors instruction in African languages and cultures, offering a number of African studies courses each semester. The center administers an interdisciplinary minor for undergraduates, and an undergraduate major in African studies can be arranged through Individual Plans of Study (IPS). Support for graduate students and arrangements for field experiences in Africa are also concerns of the center. The Center for African Studies is located at 1208 West California Street, Room 101, Urbana, IL 61801.

**AFRO-AMERICAN ACADEMIC PROGRAM**

This program integrates interdisciplinary curricular offerings from the social sciences and the humanities, with a concentration on blacks in North America. The unit sponsors an interdisciplinary minor in the College of Liberal Arts and Sciences. The program offers a core set of courses in Afro-American studies along with additional courses cross-listed with other departments each semester. The Afro-American Studies office is located at 1204 West Oregon Street, Urbana, IL 61801.

**OFFICE OF WOMEN'S STUDIES**

The Office of Women's Studies supports interdisciplinary scholarship on the study of women in societies and cultures. Several core courses are offered regularly, and women's studies courses are offered by other departments as well. The unit sponsors an interdisciplinary minor for students in the sciences and letters curriculum and a teacher education minor for students completing a degree program in teacher education who wish to be able to teach women's studies in the schools. The office also advises students who wish to develop individual majors in women's studies through Individual Plans of Study (IPS). The Office of Women's Studies is located at 304 Stiven House, 708 South Mathews Avenue, Urbana, IL 61801.



Curricula

CURRICULUM IN SCIENCES AND LETTERS: GENERAL REQUIREMENTS

For the Degree of Bachelor of Arts or Bachelor of Science in Liberal Arts and Sciences

A student completing this curriculum receives the degree of Bachelor of Arts or Bachelor of Science in liberal arts and sciences, depending on the student's major. A student entering the College of Liberal Arts and Sciences in fall 1987 or later and electing one of the majors in the physical sciences, life sciences, psychology, mathematics, or statistics will receive the Bachelor of Science degree. A student in any of the other majors will receive the Bachelor of Arts degree.

Components of the Curriculum

The sciences and letters curriculum consists of several distinct parts, all of which are considered by the college to be necessary for a liberal education. Below is an outline of the components of the degree program<sup>1</sup>. A detailed discussion of each component follows.

REQUIREMENT	EXPLANATION	HOURS
ENGLISH <sup>1</sup>	RHET 105, SPCOM 111, and 112; or equivalent required.	4-6
FOREIGN LANGUAGE	Completion of the fourth semester or equivalent of a language is required. (Completion of four years of a single language in high school satisfies this requirement.)	0-16
GENERAL EDUCATION <sup>1</sup>	Ten courses (at least 30 hours), including at least five in Area I (generally subjects in the arts and social sciences) and at least five in Area II (generally subjects related to the sciences)	30
Area I	Literature and the arts Historical and philosophical perspectives Social perspectives Non-Western cultures and traditions Minimum of 5 courses	1-2 courses 1-2 courses 1-2 courses 1 course
Area II	Physical science Biological science Behavioral science Mathematics Science and society Minimum of 5 courses	1-2 courses 1-2 courses 1-2 courses 0-2 courses 0-1 courses
MAJOR	See requirements of majors beginning on page 254. Normally, courses for the major must be chosen in consultation with the departmental adviser. A 3.0 grade-point average in the major is required for graduation. At least 12 advanced hours in the core for the major must be taken on this campus.	(normally) 40-60
ADVANCED HOURS	The courses for the degree program must include at least 21 hours of courses designated as advanced (i.e., all 300-level courses and a few specially designated 200-level courses).	
ELECTIVES	Courses freely chosen (and not counting toward completion of the requirements above) subject only to the restriction that no more than 24 hours may be outside LAS.	Enough to total at least 120 hours
RESIDENCE	First 90 hours or last 30 hours on this campus. Last 60 hours at a 4-year school. At least 12 advanced hours in the core for the major must be taken on this campus.	
TOTAL FOR THE DEGREE	.....	At least 120 hours

<sup>1</sup>The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

## English Composition Requirement<sup>1</sup>

The ability to write effectively is a cornerstone of a liberal education. All students in the sciences and letters curriculum must satisfy the campus rhetoric requirement. See page 76 for a statement of the requirement. Students are strongly encouraged to include additional writing courses in their programs whenever possible.

---

<sup>1</sup>The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

---

## Foreign Language Requirement

Each student in the sciences and letters curriculum is expected to learn a foreign language in the undergraduate program. A minimum expectation is that the student obtain a knowledge equivalent to the completion of the fourth semester of college study in a language. Some programs may require additional study or the study of a specific language. A student planning on graduate study may wish to consult the department of intended graduate study about language requirements for the graduate program. This may dictate the student's choice of language study during undergraduate work.

The foreign language requirement may be met in any of the following ways:

1. Satisfactory completion of four years of the same foreign language in high school;
2. Satisfactory completion of the fourth-semester level of a language in college;
3. Satisfactory completion of the third-semester level in each of two languages by any combination of high school and college work;
4. Satisfactory performance at the fourth-semester level in a language proficiency examination approved by the College of Liberal Arts and Sciences and the appropriate department.

## General Education<sup>1</sup>

General education courses are the foundation vehicle for the college's unique mandate: the provision of the intellectual core of undergraduate study at the University. Through these required courses, each student in the college is expected to obtain an understanding of the ways in which knowledge is acquired and used in the diverse disciplines represented by the University's curricula. The graduate must have some acquaintance with literature and the arts, history, philosophical inquiry, and the insights and techniques of the social sciences, as well as the aims and methods of the natural sciences.

Students are therefore required to complete broadly distributed course work in two general areas—one in the arts and social sciences, the other in mathematics and the sciences. Students must take at least ten courses: five in Area I (arts and social sciences) and five in Area II (mathematics and science). The specific list of the distribution of courses is given in Components of the Curriculum, page 249. The *LAS Student Handbook* provides a list of courses approved for each of the general education categories.

The general education categories and their purposes are briefly described below, together with an *abbreviated* listing of some of the disciplines from which courses for these categories are drawn.

**Literature and the Arts.** To consider the literary, visual, and performing arts as aesthetic or creative achievements. (English, language departments, art history, music)

**Historical and Philosophical Perspectives.** To understand both the events and ideas of the past, thus acquiring a fresh perspective on the present; to understand the major philosophical issues that confront human beings. (Classical civilization, history, philosophy, religious studies)

**Social Perspectives.** To acquire an understanding of social contexts and institutions. (Anthropology, economics, geography, political science, sociology)

**Non-Western Cultures and Traditions.** To attain a broad awareness of the values and traditions of people from different cultures. (African studies, anthropology, Asian studies, history, religious studies)



**Biological Sciences.** To consider the structure and function of life forms, their ecological or their evolutionary relationships, and their importance to the human community. (Anthropology; biology; ecology, ethology, and evolution; entomology; microbiology; physiology; psychology)

**Physical Sciences.** To comprehend the major aspects of the physical world and to become conversant with the nature of scientific inquiry. (Astronomy, chemistry, geography, geology, physics)

**Behavioral Sciences.** To study individual human behavior. (Psychology)

**Mathematics.** To study a substantial mathematical endeavor or to explore the scientific and humanistic import of mathematics. (Mathematics, computer science, statistics)

**Science and Society.** To explore the evolution and application of particular sciences and/or technologies together with their social and cultural implications. (Astronomy, computer science, geography, history, psychology, sociology)

Students are urged to consult with their advisers regarding the choice of courses to complement their programs and to meet educational objectives. Some of the approved courses have prerequisites.

#### NOTES:

- The campus Senate, the Faculty General Education Board, and the undergraduate colleges are working to revise and enhance the general education requirements. Some changes in requirements are expected to take effect in fall 1991; other changes are expected to be implemented incrementally in following years. Thus, new students in each entering class should confirm their general education requirements by consulting the *LAS Student Handbook*, their departmental advising office, and/or the Student Academic Affairs Office of the College of Liberal Arts and Sciences.
- The credit-no credit option may not be used for courses that satisfy general education requirements.
- There are no limits on the number of courses from a single department that may be used to satisfy the requirements.
- Courses taken to satisfy major requirements may also be used to satisfy general education requirements provided they are on current general education lists.
- A student who successfully completes a College-Level Examination Program general examination in an area of study, using University of Illinois standards, will receive a waiver of the requirement in that area and, in certain cases, course credit. See the *LAS Student Handbook* for details.

Students who receive college credit for Advanced Placement work will find that some course credit generally will apply toward the relevant requirement. For example, Advanced Placement scores of 4 or 5 in English Literature will provide 3 semester hours of credit in English 103 and, therefore, count toward the requirement for literature and the arts. See page 30 for current credit policies for Advanced Placement examinations.

Similarly, proficiency credit received through a department's own testing program may be used to satisfy general education requirements.

Students planning to study in specialized curricula or in teacher education curricula will be subject to the requirements as indicated elsewhere in this catalog rather than the above requirements.

---

<sup>1</sup>The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

## Major

Each student in the sciences and letters curriculum is expected to study a single discipline in some depth as well as obtain mastery of any related course work necessary for careful study of the chosen discipline. This portion of the student's program of study is called the *major*. Prior to August 1988, the study-in-depth portion was called the *field of concentration*; as of August 1988, the term *field of concentration* was replaced by the more traditional term *major*, although the requirements for each major remained exactly those of the corresponding field of concentration.

The major consists of approximately 40 to 60 hours of course work designated by the department and approved by the faculty of the college. Most majors will have a portion of the required course work in subjects relating to the major and supporting the major, but not chosen from courses in the major department; this is called the *supporting course work*. The major will have at least one-half of the course work selected or designated from courses numbered 200 and above.

There are thirty-nine majors from which students may choose, and a number of them have multiple options within the major. A complete list of the majors available can be found on pages 240 and 241. The major should be chosen no later than the junior year. Since most majors require that the student choose courses in consultation with a faculty adviser, students should plan to discuss the major with a faculty adviser early in the junior year. In most cases, a student will be expected to submit to the college a written list of courses for the major (the major plan) during the junior year.

Since the major is a required portion of the sciences and letters curriculum, students must take all course work for the minimum requirements of the major for a traditional letter grade (or on the satisfactory-unsatisfactory basis). The credit-no credit grading option may not be used for courses in the major.

The satisfactory completion of a major requires not only the completion of a stated amount of course work, but also that the student earn at least a 3.0 average in courses for the major. In order to graduate, a student should earn at least a 3.0 grade-point average in all courses that are included in the major average and taken on this campus and at least a 3.0 average in all courses that are included in the major average and taken here and elsewhere. Consult the department or the college office for a list of courses included in the major average for a specific concentration.

Each student is expected to complete a minimum amount of advanced course work for the major on this campus. Specifically, a student normally completes on this campus at least 12 hours of advanced core course work (course work within the department) in the major.

## Advanced Hours Requirement

A liberal arts program requires study in a number of areas (general education requirements) and study in some depth. Thus, each student is expected to complete a minimum portion of the undergraduate program in courses that presume some prior knowledge of the discipline. A course is considered advanced if it presumes such prior knowledge as indicated by the faculty (specially designated 200-level courses), by the course number (most courses numbered 300 or above), by the prerequisites necessary for enrollment in the course, or by the quality and depth of work expected of students in the course. All students in the sciences and letters curriculum are expected to complete at least 21 hours of courses designated as advanced by the college in order to graduate. All such courses must be taken at baccalaureate-granting institutions. Courses designated as advanced are those courses numbered 300 or above and those 200-level courses that are specially designated as advanced. A list of such advanced 200-level courses may be found in the *LAS Student Handbook*.

## Minors and Interdisciplinary Minors

The College offers a formal system of minors which may be completed in conjunction with a major in the Sciences and Letters Curriculum. A minor is a coherent program of study (generally 18-24 hours) requiring some depth in the subject, but is not as extensive as the major. Requirements for minors (see page 293) are determined by the department and approved by the College. Minors are optional. Students do not have to complete a minor as part of their degree requirements, though some majors may allow use of a minor in place of other supporting course work.

The minor may be completed and noted only at the time of completion of a bachelor's degree in LAS (in the Sciences and Letters Curriculum). While the minor does not replace other degree requirements, courses may be used both for the minor and to meet other degree requirements as appropriate. The student should notify LAS of intention to complete a minor at the beginning of the student's senior year so that its completion may be verified. A list of requirements for approved minors is available in the LAS Student Office, 270 Lincoln Hall.

There are several interdisciplinary areas in which there currently are no formal degree programs, but in which scholarly needs or employment demands require recognition. In these areas, the college offers an interdisciplinary minor. The interdisciplinary minor differs from the standard minor in that it may require attainment of a predetermined and approved grade-



point average in the courses for the program and students are required to consult with an adviser regarding selection of course work. The student should notify the unit of the interdisciplinary minor at the beginning of the student's final semester before graduation so that the completion of the interdisciplinary minor may be verified; the college generally cannot monitor completion of the interdisciplinary minor. Currently, the interdisciplinary minors are those in African Studies, Afro-American Studies, Latin American Studies, and Women's Studies.

## Electives

Most liberal arts majors allow time in the student's program for a number of courses chosen freely from among the University's offerings. These courses, called electives, may be used to prepare for professional study, to prepare for business and career opportunities, or simply to explore additional interests. In addition to all courses used to fulfill the minimum graduation requirements of the college (rhetoric, foreign language, general education, and major), a student following a major may use as electives:

- Courses offered by the College of Liberal Arts and Sciences;
- Courses offered by departments and schools in other colleges of the University that sponsor majors in LAS [art (excluding applied art courses), computer science, economics, finance, music (excluding applied music courses), or physics];
- A maximum of 24 hours (to be counted toward graduation) of courses not included in either of the above, that is, courses offered by departments and schools in other colleges on campus. Examples of courses in this category are accounting, business administration, engineering, applied art courses, and applied music courses.

Undergraduate students of high academic standing (i.e., a 4.0 grade-point average or higher in courses taken beyond the sophomore level) within 10 semester hours of earning their bachelor's degrees may elect courses in the Graduate College for *graduate* credit with the consent of the dean of that college. Also, students with senior standing may petition the Graduate College for permission to elect graduate courses for *undergraduate* credit. Interested students should first consult the College of Liberal Arts and Sciences.

## Residence

Students must satisfy the University residence requirement for graduation (page 75). They must complete on this campus, uninterrupted by work elsewhere, either the first three years (at least 90 hours of course work) or the last year (at least 30 hours). The hours must be applicable toward the degree sought. In addition, all students must earn 60 hours of course work at four-year (baccalaureate-granting) institutions after any work at community colleges. Students in the sciences and letters curriculum are expected to earn at least 12 hours of credit in advanced courses in the core for the major on this campus (page 252).

## Total Hours

A total of 120 semester hours acceptable toward the degree is required for graduation in the sciences and letters curriculum.

Students should be aware that there are several specific limitations on the amount of particular kinds of credit that may be used in the 120 hours: no more than 24 elective hours outside the college, as discussed above; no more than 4 hours of credit in basic physical education courses; no more than 6 hours of credit in military science courses (see the *LAS Student Handbook* for details); no more than 4 hours of credit in religious foundation courses; no more than 12 hours of credit in undergraduate open seminar (199) courses; and no more than 18 hours of credit in independent study and 199 courses. See the *LAS Student Handbook* for details about the credit limitations in each of these areas.

Students matriculating at some college or university in June 1989 or later may not use credit in algebra (MATH 112 or equivalent) toward a baccalaureate degree in the College of Liberal Arts and Sciences. In addition, students in the programs requiring trigonometry for admission (e.g., the specialized curricula in chemical engineering, chemistry, and physics) may not use credit in trigonometry (MATH 114 or equivalent) toward an LAS degree. See the *LAS Student Handbook* for further details.

## SCIENCES AND LETTERS MAJORS

### Actuarial Science

This major is sponsored by the Department of Mathematics. See page 280.

### Anthropology<sup>1</sup>

Anthropology courses: 36 hours (including ANTH 102, 103, 220, 230, 240, and 270)

Supporting course work: 18 hours (chosen in consultation with an adviser)

Anthropology, which views human behavior and society (both past and present) in a cross-cultural perspective, combines scientific and humanistic interests in a modern social sciences framework. It consists of biological anthropology (human genetics and evolution, and the zoological order of primates), archaeology (the prehistory of cultures, and the origins and growth of human technology), sociocultural anthropology (the comparative study of social structures and institutions from simple hunter-gatherer settings to complex urban settings), and anthropological linguistics (the comparative study of languages and communications). Although the student should strive for a topical and geographical balance, an undergraduate may specialize in one of these four branches and also may study some world cultural area intensively through an area studies program. Anthropology is an appropriate major for those seeking a general liberal education; for those preparing for professional study and careers in law, medicine, or commerce; and for those planning further graduate study in anthropology. Professional anthropologists work as research scientists and teachers in museums, universities, and archaeological surveys or as staff members in government agencies, social service programs, and business firms in which international understanding of human and social concerns is important.

### REQUIREMENTS

The 36 hours in anthropology must include ANTH 102, 103 (or 104 for honors students), 220, 230, 240, and 270. The departmental adviser may waive a 200-level course requirement, but the student will still be required to take 36 hours of anthropology course work. Four courses totalling at least 12 hours in anthropology must be at the advanced level (generally 291 and 300-level courses); only one of these four courses may be ANTH 398. All students must discuss their selection of anthropology courses and supporting course work with a departmental adviser. Students must take 18 hours of supporting course work in another department. At least 9 hours of the supporting course work must be at the advanced level. Students may substitute an official minor offered by another department for the supporting course work.

**Departmental Distinction.** To be eligible for distinction, a student must maintain a 4.6 average in 32 hours of anthropology courses, including ANTH 291 and /or 293, and submit a thesis for judgment by the departmental honors board.

---

<sup>1</sup>This statement reflects a revision that was pending final approval at the time of publication.

### Art History

Art history courses: 32 hours (including ARTHI 111 and 112)

Supporting course work: 15 hours (chosen in consultation with an adviser)

Like the other humanities, the history of art as an undergraduate major offers an enrichment of and a preparation for life, rather than training for a specific occupation. The student who goes on to graduate work in the field can look forward to becoming a teacher of the subject, to membership on the staff of a museum, or to employment in a commercial art gallery.

Working in consultation with the undergraduate adviser for art history, each student will design a program of study that satisfies the requirements listed below. Students who wish to take a considerable number of studio courses as part of the major should enroll in the history of art option offered by the School of Art and Design within the College of Fine and Applied Arts.



## REQUIREMENTS

1. **Courses in the history of art and architecture.** ARTHI 111 and 112 and at least 24 hours of art history in 200- and 300-level courses, including one 3-hour course in each of the following areas: (a) ancient and medieval art; (b) Renaissance, baroque, and rococo art; (c) late eighteenth-, nineteenth-, and twentieth-century art; and (d) African, Asian, oceanic, and pre-Columbian art.

Courses in the history of architecture, excluding ARCH 210, may be used with the approval of the adviser for as much as 12 hours of credit in meeting the 24-hour requirement.

2. **Foreign language.** French or German is strongly recommended for fulfilling the foreign language requirement; however, another language may be used with the approval of the adviser as the needs of the student's program dictate. A student who has decided to make the history of Oriental art his or her major study area in undergraduate and graduate work would be well advised to satisfy the foreign language requirement with Chinese or Japanese rather than with a European language.
3. **Supporting course work.** At least 15 hours of courses at the 200 and 300 levels in supporting areas chosen with the approval of the adviser must be completed. Although the program in art history allows considerable latitude in the selection of such courses, they should be chosen with the goal of enhancing the student's understanding of the cultural context within which works of art and architecture have been created. Recent practice suggests that supporting courses will most commonly be drawn from such fields as anthropology, classics, history, literature, music and dance history, philosophy, psychology, and religious studies.

**Departmental Distinction.** To be eligible for distinction, a student must earn a high grade-point average and complete at least 4 semester hours of independent research. See the undergraduate adviser for details.

## Asian Studies

Requirements: Generally 53 hours

Language courses: 26 to 30 hours of a single Asian language

Literature, civilization, or society courses: 15 hours

Supporting course work: 12 hours

This major, sponsored by the Center for East Asian and Pacific Studies in cooperation with the Program in South and West Asian Studies, permits a study in language and literature, language and civilization, or language and society focusing on a single Asian country or region. The major may be useful for the student seeking a broad liberal arts education or as preparation for study in a graduate or professional program.

## REQUIREMENTS

All students must complete 6 courses in a single Asian language in combination with one of the following options, which must include 12 hours of nonlanguage courses at the 300 level:

### OPTIONS

#### Language and Civilization Option

1. Civilization—five courses in art, history, literature, music, and/or religious studies relevant to the Asian language studied.
2. Supporting course work—four related courses, including AS ST 261, HIST/ANTH 168, or ANTH 186/HIST 172.

#### Language and Literature Option

1. Literature—five courses in relevant Asian literatures.
2. Supporting course work—four courses in art, history, linguistics, music, and/or religious studies, including HIST 170, ANTH 186/HIST 172, AS ST 262, or HIST/ANTH 168.

#### Language and Society Option

1. Society—five courses in the social sciences relevant to the student's area of geographical interest.
2. Supporting course work—four related courses, including HIST 170, ANTH 186/HIST 172, AS ST 262, or HIST/ANTH 168.

**Departmental Distinction.** To be eligible for distinction, a student must maintain a 4.25 cumulative grade-point average and a 4.5 grade-point average in Asian studies, complete two 300-level (or 400-level) nonlanguage courses in Asian studies beyond minimal major requirements, and receive the endorsement of the faculty adviser and the program's honors committee. A candidate is advised to consult the faculty adviser about all details at the beginning of the senior year.

## Astronomy

Astronomy courses: 18 hours (300-level astronomy and physics courses)

Supporting course work/prerequisites: 3 or 8 hours of introductory astronomy, 12 hours of general physics, and 11 (or 10) hours of calculus

The major in astronomy demands both a broad and an in-depth exploration into astronomy and allied disciplines, rather than focusing on one relatively limited area of the subject. Specific programs of study for individual students must be designed and periodically updated through mutual discussions between the students and their academic advisers. Students should note sequential prerequisites for courses.

### REQUIREMENTS

The basic major consists of a minimum of 44 hours distributed as follows:

1. ASTR 101 and 102, or 210;
2. MATH 120, 132, and 242 or equivalent;
3. PHYCS 106, 107, and 108;
4. A minimum of 18 hours in 300-level astronomy and physics courses (excluding PHYCS 319), of which at least 10 hours must be in astronomy courses.

Additional courses recommended for students majoring in astronomy, especially those intending to pursue graduate study in astronomy, include MATH 280 and 285, and PHYCS 331, 332, 333, 361, 386, and 387.

**Departmental Distinction.** A student majoring in astronomy may earn distinction by attaining a minimum grade-point average of 4.5 in 300-level astronomy and physics courses.

## Chemistry

Chemistry courses: 30 hours (including general chemistry)

Supporting course work and/or prerequisites: 11 (or 10) hours of calculus, and 10 or 12 hours of general physics

Students may pursue chemistry by following either (1) the professional curriculum in chemistry (leading to the Bachelor of Science in Chemistry) or (2) the chemistry major in the sciences and letters curriculum (leading to the Bachelor of Science in Liberal Arts and Sciences). The chemistry major in the sciences and letters curriculum (requirements described below) is used by some students planning chemistry careers, but it is more often chosen by students wishing to obtain chemistry backgrounds for use in related fields.

In contrast, the professional curriculum in chemistry is a rigorous, specialized program suitable for those planning careers in chemistry. It meets standards prescribed by the American Chemical Society. The requirements are detailed on page 301.

### REQUIREMENTS

Students must complete at least 30 hours in chemistry and biochemistry, excluding CHEM 100, 103, 115, 122, and 199. The 30 hours must include CHEM 340 or 342 and two other 300-level courses, at least one of which must be outside physical chemistry. Transfer credit in chemistry must be approved by an adviser in chemistry in order to be included in the 30 hours. Students must complete mathematics through MATH 242 or 245 and physics through PHYCS 102 or 108.

**Departmental Distinction.** Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have a minimum cumulative grade-point average of 4.0 and must complete a senior thesis course.

**Cooperative Education Program.** Students accepted into the School of Chemical Sciences Cooperative Education Program spend alternate periods of attendance at the University with periods of employment in industry or government. Transcript recognition is given as well as a certificate of participation at graduation. Additional information and applications are available in the School of Chemical Sciences placement and advising office, 107 Noyes Laboratory, 505 South Mathews Avenue, Urbana, IL 61801.



## Classics

Classics courses: 30 to 36 hours (depending on option chosen)

Supporting course work: 12 hours (chosen with approval of an adviser)

The study of the languages and cultures of ancient Greece and Rome is valuable for those seeking a broad education the liberal arts or preparing for graduate study in one of the many fields of Classical, Medieval, or Renaissance scholarship. Within the general requirements of the major, the Department of the Classics offers individual programs designed to meet the needs and interests of each student. Close interaction between faculty and students, individual attention, tutorial instruction, opportunity for study abroad in Greece and Italy, and the unmatched resources of the Classics Library and the collections of ancient art and other objects from classical antiquity in the museums on campus provide unique advantages for the pursuit of classical studies.

### REQUIREMENTS

Majors in classics may choose one of the following options. Each option requires an additional twelve hours of supporting course work. Majors must plan their programs in consultation with a departmental adviser.

### OPTIONS

#### Classical Archaeology Option

Thirty hours of classical civilization courses, of which at least 20 hours must be in classical archaeology (CLCIV 131, 132, 217, 218, 231, 232, 343, 344, 391), and at least 12 hours in advanced courses.

#### Classical Civilization Option

Thirty hours of classical civilization courses at the level of 114 and above, at least 12 hours of which must be in advanced courses.

#### Classics Option

Thirty-six hours of Greek and Latin, of which only 4 hours at the 100-level may be counted, including LAT 311, GRK 311, and at least 6 additional hours in advanced courses in each language.

#### Greek Option

Twenty-four hours of Greek (excluding GRK 101), including GRK 311 and at least 9 additional hours in advanced courses; 6 hours from CLCIV 114, 217, 232, 250, 343, 390, 391 (CLCIV 390 and 391 apply only when offered on Greek topics).

#### Latin Option

Twenty-four hours of Latin (excluding LAT 101, 102, 105), including LAT 311 and at least 9 additional hours in advanced courses; 6 hours from CLCIV 116, 218, 344, 390, 391 (CLCIV 390 and 391 apply only when offered on Latin/Roman topics).

**Supporting course work.** Twelve hours, selected with the approval of the adviser, from the following courses or from other appropriate courses: ARCH 210, 310, 311, 318; ARTHI 111, 215, 216, 321, 322, 323, 366; HIST 181, 182, 347, 381, 382, 383, 384; PHIL 203, 310; MUSIC 310; POL S 260, 393; RELST 106, 201, 202, 342, 343; CLCIV (not approved for options in classical archaeology and classical civilization); Greek (not approved for options in Greek and classics); Latin (not approved for options in Latin and classics); COP 301, 302; other foreign languages. For Classical Archaeology, also: ANTH 102, 105, 107, 220, 250, 338, 351, 354, 355, 356, 378; ART&D 140; ARTPH 115, 215, 216, 220; C E 201; L A 150, 180.

**NOTE:** Majors choosing the classical civilization and classical archaeology options are advised, but not required, to satisfy the college foreign language requirement with one of the classical languages.

**Departmental Distinction.** Students seeking departmental distinction must have at least a 4.5 average in relevant courses and should consult a member of the department's honors committee at the earliest opportunity.

## Comparative Literature

Comparative literature courses: 15 hours

Literature courses: 24 hours

Supporting course work: 9 hours (chosen in consultation with an adviser)

A student who elects comparative literature as a major must complete 48 semester hours in the courses indicated below, including at least 12 hours in courses numbered 300 or above. Besides knowing English, the student must have sufficient linguistic skill in at least one foreign language to participate in 200- and 300- level literature courses offered by the various foreign language and literature departments.

As soon as a student contemplates choosing comparative literature as a major, he or she should consult the faculty adviser, who will assist the student in selecting appropriate courses that will be especially helpful as preparation for the advanced comparative literature training beginning with the junior year. Courses in classical civilization and in literature (particularly courses dealing with works from several countries) are especially recommended at relatively early stages of study. An ample selection of such courses at the 100 and 200 levels exists in the various literature departments.

### REQUIREMENTS

The distribution of course work allows for considerable flexibility. It must include:

1. At least 15 hours in comparative literature courses, including C LIT 201 and 202. The remaining hours should be selected from different types of courses (e.g., C LIT 141, 142, 189, 190, 341, 351, 361, 371).
2. At least 15 hours in one literature in the original language (ancient or modern, including Far Eastern and African), 12 of which are at the 200 level or above, studied in depth and in its historical development. (Normally this is the primary literature of the student's educational background.)
3. At least 9 hours at the 200 level or above in a second literature in the original language. With the assistance of the adviser, these courses should be carefully chosen so as to correlate meaningfully with the student's primary literature. A student may center his or her interest on a cultural period such as medieval, Renaissance, neo-classical and enlightenment, or modern (nineteenth and twentieth centuries), or on genres, relations, or critical theory.<sup>1</sup>
4. At least 12 hours of credit in literature courses used to satisfy the three requirements above must be at the 300 level or approved for advanced hours in the College of Liberal Arts and Sciences.
5. At least 9 hours in any single national literature or several, including comparative literature; or in other humanistic fields, such as history, philosophy, speech, art, music, psychology, sociology, theatre, anthropology, and Asian studies. Because some of the courses in these subjects are more suitable than others to balance a student's individual major in comparative literature, the student must follow the guidelines set by his or her adviser.
6. Western civilization: C LIT 141 and 142 (6 hours) or HIST 111 and 112 (8 hours); these sequences may be used to satisfy the requirements, respectively, of (1) or (5) above. Beginning students in comparative literature are strongly urged to take the C LIT 141-142 sequence.

**Departmental Distinction.** To be eligible for distinction, a student must have at least a 4.5 cumulative grade-point average and a 4.75 grade-point average in departmental courses, complete a senior thesis (C LIT 293), and receive the approval of the departmental honors committee. The departmental honors committee will determine the level of distinction to be awarded.

---

<sup>1</sup> If one of the literatures studied is English, a student who continues in a graduate program in comparative literature will be required to acquire a reading knowledge of a second foreign language (i.e., one foreign language for the B.A., two foreign languages for the M.A., three foreign languages for the Ph.D.).

## Computer Science (Mathematics and Computer Science)

Computer science courses: 25 hours (including CS 121)

Mathematics courses: 31 to 33 hours (including calculus)

This major is jointly sponsored by the Departments of Mathematics and Computer Science. It is designed to prepare students for professional or graduate work in mathematics and computer science.



REQUIREMENTS

- 1. Mathematics and computer science core requirements: (32-33 hours)
    - MATH 120, 132, and 242, or 135 and 245, or equivalent— calculus 10-11
    - MATH 247—Intermediate Analysis 3
    - CS 121 and 225—software core courses 7
    - CS/MATH 257—Numerical Methods 3
    - CS 273—Introduction to Theory of Computation 3
    - CS 231—Computer Architecture I 3
    - CS 232—Computer Architecture II 3
  - 2. 300-level mathematics and computer science requirements: (24-25 hours)
- Students must elect at least eight 300-level mathematics and computer science courses, including one from each of the following groups:
- Group I: MATH 361/STAT 351, STAT 310/MATH 363—probability-statistics
  - Group II: MATH 312, 317—algebra and discrete mathematics
  - Group III: MATH 315, 318—matrices and linear algebra
  - Group IV: MATH 341, 346, 384—applied analysis
  - Group V: MATH 344, 347—real variables
  - Group VI: MATH 314, MATH/CS 373, MATH/CS 375, CS 376,—foundations of computer science
  - Group VII: CS 323, 325—software
  - Group VIII: CS/MATH 355, 358, 359—numerical analysis

NOTES:

- A student who transfers into this major after having taken a 100-level computer science course other than CS 121 should take CS 122 in lieu of CS 121. All other students in this major must take CS 121.
- A student taking a cross-listed course in this major may designate it as either mathematics or computer science.

**Departmental Distinction.** Students interested in attaining departmental distinction in mathematics and computer science should consult with the honors adviser for program requirements early in the junior year.

Economics

Economics and statistics courses: 27 to 30 hours.  
Supporting course work: 5 to 8 hours of mathematics, and 18 hours in courses related to major interest in economics

Economics is a social science that studies the problems caused by scarcity and how individuals, institutions, and societies may deal with these problems. Economics shares common interests with business-oriented disciplines, such as finance and business administration. Economists frequently require quantitative skills, such as calculus and statistics, to derive economic principles that are useful in forming policies designed to solve economic problems.

REQUIREMENTS

The major in economics requires course work in three areas. For further information, see the *Economics Bulletin* available in the office of undergraduate studies of the department. The requirements are:

- 1. **Economics and Statistics:** Introductory economics (ECON 102 and 103<sup>1</sup>) and at least 18 hours of additional economics, including ECON 300 and 301 (but excluding ECON 199, 294, 295, and 299); and 6 hours of statistics (ECON 172 and 173 or equivalent).
- 2. **Mathematics:** The minimum requirement is MATH 125-134 or MATH 120-132 or equivalent (see *Economics Bulletin*). Additional mathematics courses are recommended.
- 3. **Supporting course work:** At least 18 hours in courses outside economics but related to the student's major interest in economics (see *Economics Bulletin* for details and examples).

**Departmental Distinction.** A student must have a grade point average of at least 4.25 overall and at least 4.50 in economics; complete a research project (e.g., complete ECON 294-295 or 299); and be recommended by the faculty research adviser.

<sup>1</sup>For students entering the University of Illinois at Urbana-Champaign prior to August 1991, ECON 101 may be used in place of the ECON 102-103 sequence.

## English (Majors in English and Rhetoric)

### English<sup>1</sup>

English courses: 30 hours

Supporting course work: 6 to 8 hours of Western/British civilization, plus an official minor or 20 additional hours chosen in consultation with an adviser, for a total of 24-29 hours

The study of English and American literature is the study of traditions, masterpieces, and critical theory and practice. Students who major in English have many options in planning a field of study, but the basic program is designed to accommodate students who seek to broaden their familiarity with our literature, to intensify their language skills for personal and professional reasons, and to learn more about literature's relationship to the other arts, history, philosophy, psychology, and the modern languages.

### REQUIREMENTS

Students must complete the following:

1. **English courses.** 30 hours, distributed as follows: ENGL 101—Introduction to Poetry (it is strongly recommended that this course be taken prior to advanced courses in the major); three survey courses (ENGL 209—English Literature from the Beginning to 1798; ENGL 210—English Literature from 1798 to the Present; and ENGL 255—Survey of American Literature I); a 300-level Shakespeare course; and at least one course from each of the following five groups:

Group I (British literature to 1800): ENGL 202, 204, 206, 315, 316, 321, 326, 327, 328, 329

Group II (British literature after 1800): ENGL 240, 247, 331, 334, 335, 341, 342

Group III (American literature): ENGL 249, 256, 259, 260, 347, 350, 351

Group IV (major author other than Shakespeare): ENGL 311, 323, 343, 355

Group V (theme, mode, genre, and interdisciplinary approaches): ENGL 215, 241, 242, 243, 244, 248, 249, 273, 274, 275, 280, 281, 284, 303, 361, 362, 365, 366, 367, 368, 373, 375, 383, 387

No single course can be used to fulfill the requirement of more than one group, and at least nine hours (excluding the course in Shakespeare) must be at the 300 level.

2. **Supporting course work.** 24-29 hours. These hours will consist of HIST 111-112 (8 hours), HIST 131-132 (8 hours), or C LIT 141-142 (6 hours) plus one of the following options, *with the approval of the English adviser*:

a. An official minor in another department or unit (typically 18-21 hours).

b. Twenty hours comprising courses from two or more fields and combined into an intellectually or professionally coherent study. At least six hours of advanced (300-level or designated 200-level) courses are required. Up to 6 hours in English or cross listed in English and *not* counted toward major requirements may be approved for a topically organized study. Possibilities for topical studies include prelaw, premedicine, precommerce, business communications, marketing, publishing, medieval studies, and other cross-disciplinary topics.

3. **Special recommendations.**

—Students interested in the departmental honors program should consult the English Advising Office.

—Students interested in the English teacher-training program must consult with the teacher-training adviser, preferably by the middle of the sophomore year. Requirements for the teacher-training program differ from requirements for the regular major.

—Students planning to enter graduate school should elect as many 300-level courses as possible, including a course in either Chaucer or Milton; a course in the history or structure of the English language; and a course in critical theory. Further, these students should consult the specific requirements of the graduate schools they plan to enter.

**Departmental Distinction.** A student interested in graduating with distinction or high distinction must enter the honors program with at least a 4.25 grade-point average, complete three honors seminars, and write a senior honors essay. To be considered for highest distinction, a student must take an additional 3 hours and complete a senior honors thesis. The level of distinction is assigned by the honors committee on the basis of grade-point average, work in English courses and in honors seminars, and the readers' evaluations of the honors essay or honors thesis. Interested students should consult the departmental honors adviser for details.

---

<sup>1</sup>This statement reflects a revision that was pending final approval at the time of publication.



## Rhetoric

Rhetoric courses: 15 hours

English courses: 15 hours of English and American literature

Supporting course work: 6 to 8 hours of Western/British civilization, plus an official minor or 20 additional hours chosen in consultation with an adviser, for a total of 24-29 hours

The advanced rhetoric program permits a student to work in one or more of three disciplines: poetry, fiction, and/or exposition. Except for the tutorial RHET 355, all courses are taught as workshops by a veteran faculty consisting largely of producing writers. The program provides excellent preparation for graduate work in writing.

### REQUIREMENTS

Students must complete the following:

1. At least one course in expository writing, either RHET 143 or 227.
2. Twelve additional hours of rhetoric selected from RHET 143, 144, 146, 204, 227, 304, 306, and 355. With the written permission of a Rhetoric adviser, three of these twelve hours may be selected from the following courses: ENGL 301, 302, 303, 381; B&T W 251, 252, 271; SPCOM 210, 315, 317, 322, 323, 332; JOURN 326 and PHIL 102.
3. One course in Shakespeare (ENGL 318 or 319).
4. Twelve additional hours of English and American literature courses selected from 200- and 300-level courses.
5. Supporting course work. 24-29 hours. These hours will consist of HIST 111-112 (8 hours), HIST 131-132 (8 hours), or C LIT 141-142 (6 hours), plus one of the following options, *with the approval of a rhetoric adviser*.
  - a. An official minor in another department or unit (typically 18-21 hours).
  - b. Twenty hours comprising courses from two or more fields and combined into an intellectually or professionally coherent study. At least six hours of advanced (300-level or designated 200-level courses) are required. Up to six hours in English or cross listed in English and not counted toward major requirements may be approved for a topically organized study. Possibilities for topical studies include prelaw, premedicine, precommerce, business communications, marketing, publishing, medieval studies, and other cross-disciplinary topics.

**Departmental Distinction.** A student must enter the honors program with a 4.25 grade-point average and complete two English honors seminars and a significant writing project in RHET 355. The level of distinction is assigned by the honors committee based on work in rhetoric courses and honors seminars and on the readers' evaluations of the writing project. Interested students should consult the departmental adviser for details.

## Finance<sup>1</sup>

Finance courses: 24 hours

Supporting course work: 28 hours (as specified below)

The field of finance is concerned with the acquisition of funds and the determination of the use of funds by a business or an individual. In this process, an important aspect is the valuation of assets, both financial and real. Specific areas of finance include the acquisition and use of funds by businesses (business finance), the valuation of financial assets (investments), the financial environment and participants (money and banking), the valuation and financing of real properties (real estate), and an assessment of risks and programs to insure against risk (insurance and risk management).

### REQUIREMENTS

Students must complete the following:

1. At least 24 hours of finance courses including:
  - a. FIN 254
  - b. Seven additional finance courses. Current recommendations of courses in each program area within finance are available in the department office.
2. At least 28 hours of supporting courses including:
  - a. ACCY 201 and 202
  - b. MATH 134 (or equivalent)
  - c. CS 105
  - d. ECON 102-103<sup>1</sup>, 172, 173

- e. At least 3 hours from the following courses. Current recommendations of courses in each program area within finance are available in the department office.
- ACCY 211, 221, 251
  - ARCH 379
  - B ADM 200, 202, 210, 261, 274, 321
  - CE 216
  - Economics (any course numbered above ECON 103, excluding ECON 172 and 173)
  - GEOG 366, 383
  - IE 335, 357, 385
  - Mathematics (any course numbered above MATH 120, excluding MATH 134)
- Additional courses may be substituted upon the approval of a finance adviser.

#### NOTES

- FIN 254 has as a prerequisite ACCY 200 or 202 and as a concurrent prerequisite ECON 172. Therefore, the supporting course work in accounting (ACCY 201 and 202) and mathematics (MATH 134) should be taken in the sophomore year.
- ECON 102 and 103 should be taken in the freshman year.

**Sample Programs.** The specific finance and supporting courses to be selected depend upon the student's interest in a particular area of finance. Programs are available in the following areas: general finance, business finance, insurance, investments, financial institutions and money markets, real estate, and risk management. It is not necessary to choose one specific program area. Finance majors seeking advice about the specific finance and supporting courses to take should consult with their advisers.

**Departmental Distinction.** Departmental distinction will be awarded on the basis of the grade-point average. See the department for details.

---

<sup>1</sup>This statement includes the new economics introductory course sequence (ECON 102-103). Students entering the University of Illinois at Urbana-Champaign prior to August 1991 may use ECON 101 in place of the ECON 102-103 sequence.

---

## French

French courses: 44 to 47 hours (beyond the 100 level)

Supporting course work: 6 to 8 hours of Western civilization, and 12 to 15 hours chosen in consultation with an adviser

### REQUIREMENTS

FR 205; 207; 209; and 210, or their equivalent; plus 32 to 35 hours in French beyond these courses. These 32 to 35 hours may not include 100-level courses, or FR 270 or 280, and must include courses as outlined below; FR 199 may be included if approved by an adviser. Twelve to 15 hours in courses are to be chosen from other departments or programs.

### OPTIONS

#### French Studies Option

1. Four courses in French language and linguistics, including FR 314.
2. Four courses in French literature: two courses in French literature prior to 1800, and two courses in French literature from 1800 to the present. FR 343—Studies in French, when dealing with a literary topic, may be substituted for one of these courses.
3. Three additional courses in French civilization, French film, French language and linguistics, French literature, or francophone studies.
4. Twelve to 15 hours in other departments chosen with the approval of the option adviser.
5. Western civilization: HIST 111 and 112, or C LIT 141 and 142.

#### French Commercial Studies Option

1. Five courses in French language and linguistics, including FR 314, 319, and 320.
2. Four courses in French civilization, French literature, or francophone studies.
3. FR 385 and 386.
4. Approved supporting course work of at least 15 hours in business administration, finance, and/or economics selected in consultation with the option adviser.
5. Western civilization: HIST 111 and 112, or C LIT 141 and 142.

**NOTE:** Consult an adviser concerning mathematics and economics courses appropriate for the fulfillment of LAS general education requirements.



**Year Abroad Program.** See page 246.

**Departmental Distinction.** A student must have at least a 4.5 cumulative grade-point average, complete a senior thesis (FR 292), and complete two additional advanced-level courses in French or in supporting course work. Consult the honors adviser for details.

## Geography<sup>1</sup>

Requirements: at least 40 hours

Geography courses: 27 to 33 hours

Supporting course work: 12 to 28 hours

Students in geography must complete both the core courses in geography and one of the seven options, for a total of at least 40 hours in the major.

A student who elects one of the options in general human and physical geography, urban and social geography, historical and regional studies, or economic geography is encouraged to include MATH 124 and 134 (finite mathematics and calculus for social scientists) as part of the undergraduate program. The options in physical environment, natural resource evaluation, and spatial graphics and analysis have specific mathematics requirements as listed below.

### REQUIREMENTS

**Core in Geography** (15 to 16 hours):

1. Students must elect three introductory geography courses chosen from physical geography (GEOG 102, 103) and human geography (GEOG 101, 104, 205).
2. GEOG 271—Spatial Analysis is required.
3. Students are strongly encouraged to elect GEOG 373—Map Compilation and Construction.
4. All students are encouraged to elect techniques courses as part of their programs. The techniques courses include GEOG 185, 273, 277, 290 (spatial programming), 370, 373, 374, 375, 377, and 378.

### OPTIONS

#### General Human and Physical Geography Option

- a. Geography courses: At least 6 hours of physical geography and 6 hours of human geography to be selected from 200- and 300-level courses, excluding GEOG 210.
- b. Supporting courses: 12 hours, chosen in consultation with the adviser, from the following: agronomy, agricultural economics, anthropology, atmospheric sciences, civil engineering, forestry, geology, history, landscape architecture, life sciences, political science, psychology, sociology, urban and regional planning.
- c. At least 40 hours total in the major, including the core courses.

#### Urban and Social Geography Option

- a. Geography courses: 12 hours chosen from GEOG 110, 204, 205, 284, 290, 294, 310, 325, 326, 365, 366, 380, 383, 384, 386.
- b. Supporting courses: 12 hours, chosen in consultation with the adviser, from the following: agricultural economics, anthropology, communications, economics, history, landscape architecture, political science, psychology, sociology, urban and regional planning.
- c. At least 40 hours in the major, including the core courses.

#### The Physical Environment (the Earth's Land and Biota) Option

- a. Geography courses: 12 hours chosen from 200- and 300-level physical geography courses (GEOG 203, 303, 304, 305, 306, 307, 308, 315, 341). Students may choose geomorphologic, biogeographic, and climatic processes.
- b. Supporting courses:
  1. MATH 120. Students in geomorphology must elect PHYCS 101; students in soils geomorphology must elect CHEM 101 and 102.
  2. Nine to 12 hours, chosen in consultation with the adviser, of courses in agronomy, anthropology, atmospheric sciences, civil engineering, forestry, geology, landscape architecture, and life sciences.
- c. At least 46 hours total in the major, including the core courses.

#### Historical and Regional Studies Option

- a. Geography courses: 12 hours chosen from GEOG 110, 204, 224, 284, 290, 310, 325, 326, 327, 331, 332, 342, 353, 355, 361, 380, 382, 383. Students may choose historical geography, historic preservation, or the geography of a continental region.
- b. Students specializing in the study of a foreign area should select an appropriate language in fulfilling the foreign language requirement.

- c. Supporting courses: 12 to 15 hours, chosen in consultation with the adviser, of courses in African, Latin American, Russian and East European, or West European area studies; American civilization; or from architecture, history, landscape architecture, and urban and regional planning.
- d. At least 40 hours in the major, including the core courses.

### **Natural Resources Evaluation Option<sup>1</sup>**

- a. Geography courses: 9 hours chosen from GEOG 203, 214, 303, 304, 305, 306, 308, 341, 361, 367; and 6 to 8 hours from the geographic technique courses (GEOG 277, 290 [spatial programming], 370, 373, 374, 375, 377, 378.)
- b. Supporting courses:
  - 1. CHEM 101 and 102; MATH 124, 134. Also ECON 101 should be included.
  - 2. Six to 9 hours, chosen in consultation with the adviser, of courses in agronomy, civil engineering, forestry, geology, life sciences.
- c. At least 44 hours in the major, including the core courses.

### **Economic Geography Option<sup>1</sup>**

- a. Geography courses: 15 to 17 hours, including GEOG 205, of which 9 hours normally will be chosen from GEOG 204, 290, 341, 361, 365, 366, 367, 383, and 384; and 6 to 8 hours from the geographic technique courses (GEOG 185, 277, 290 [spatial programming], 370, 371, 374, 375, 377, 378).
- b. Supporting courses
  - 1. ECON 101
  - 2. Twelve to 15 hours, chosen in consultation with the adviser, of courses in agricultural economics, civil engineering, economics finance, political science sociology, and urban and regional planning. ECON 360 is highly recommended.
- c. At least 42 hours in the major, including the core courses.

### **Spatial Graphics and Analysis Option**

- a. Geography courses: 15 hours, of which 9 to 12 will normally be chosen from geographic techniques (GEOG 185, 277, 290 [spatial programming], 370, 373, 374, 375, 377, 378), and the remaining from 200- and 300-level courses.
- b. Supporting courses:
  - 1. MATH 112 and 114 (if the student does not have mastery of that material from high school); also MATH 124 and 134 are strongly recommended.
  - 2. Twelve to 15 hours, chosen in consultation with the adviser, of courses in art and design; civil engineering; communications; computer science; general engineering; landscape architecture; mathematics; and urban and regional planning.
- c. At least 47 hours total in the major, including the core courses.

**Departmental Distinction:** All students majoring in geography who have maintained a University grade-point average of 4.25 and who satisfactorily complete an independent project (GEOG 291) in their senior year will be eligible to graduate with distinction in geography. Students should consult their advisers about distinction requirements as soon as they enter the major—no later than the end of their junior year.

---

<sup>1</sup>This statement does not reflect the pending Economics introductory course restructuring. This revision will be in effect for August 1991 and may affect the number of hours required for the major. Other revisions reflected in this statement were pending final approval at the time of publication. See an adviser for more information.

## **Geology**

Geology courses: 35-36 hours

Supporting course work: 21 hours

The major in geology is designed for students who want a more flexible course of study than is provided by the curriculum in geology and geophysics (see page 301). It may be used by those wishing to obtain a more liberal education and/or background in geology for use in fields such as anthropology, business, mineral economics, regional planning, journalism, law, sales, or library and information science. It is not intended to prepare a student for graduate work in the geological sciences unless the student selects additional courses in mathematics, chemistry, and physics comparable to those required in the geology and geophysics curriculum.



## REQUIREMENTS

1. Geology. 35-36 hours including: GEOL 107, 108<sup>1</sup> (8 hours), GEOL 311 (4), GEOL 317<sup>2</sup> (6), GEOL 320 (3) or 340 (4), GEOL 332 (4), GEOL 336 (4), and an additional 6 hours of 300-level geology.
2. Supporting course work. 21 hours including: MATH 120 or 135 (5), CHEM 101 and 102 (8) or 107, 108, 109 and 110 (10), PHYCS 106 (4) or 101 (5), and an additional 4 hours in computer science, physics, mathematics or life science (beyond the minimum LAS AREA II biological science requirement).

**Departmental Distinction.** Students who maintain grade-point averages of at least 4.5 in all geology courses and 4.0 in all other science and mathematics courses and who complete an acceptable senior thesis, including at least four hours of credit in GEOL 292 or 293, are recommended for graduation with distinction.

<sup>1</sup>Students who decide to follow the geology major after first taking GEOL 101 or 111 or 100 and 110 should enroll in GEOL 108; students who decide to follow the major after first taking GEOL 100 (without 110), 104, 105, or 143 should enroll in GEOL 107. The combination of GEOL 101 (or 111 or 100/110) and 102 will be accepted as a substitute for GEOL 107 and 108, but students should be aware these courses are not intended for science majors.

<sup>2</sup>GEOL 317 is a summer field course taught off campus.

## Germanic Languages and Literatures

German courses: 29 hours beyond the 100 level; 12 hours beyond the 100 level for Scandinavian  
Supporting course work: 20 to 26 hours (chosen in consultation with an adviser); 33 hours for Scandinavian.  
These hours include 6 to 8 hours of Western civilization.

A major in German serves to develop fluency in one of the leading languages of science, industry, and intellectual culture; familiarity with principles governing the structure of our Indo-European family of languages and of languages generally; insight into the use of language in literary expression and portrayal; and knowledge of the culture that finds expression through this language and its literature. The departmental option in Scandinavian provides substantially the same advantages. The following options are offered within this major:

### OPTIONS

#### German and Commercial Studies Option

Designed to provide students with an understanding of the language and customs of the business world in German-speaking countries, together with study of international affairs and commerce, especially trade with Europe.

1. Twenty-nine hours in German, including 211, 212, 220, 221, 231, 301, 302, 303, 320, and 365.
2. Twenty hours of supporting course work: (A) Western civilization. All students will complete either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours). (B) 12 to 14 additional hours outside of German language and literature selected in consultation with the major adviser. These supporting courses are usually selected from business administration, finance, and/or economics, and occasionally also from political science and geography.

#### German Literature in the European Context Option

Designed to expand the student's view of literature by providing a broad knowledge of German, drawing on courses offered by other literature departments, and exploring the relationship of literature to the arts, history, politics, and culture.

1. Twenty-nine hours in German, including GER 211, 212, 231, 232, 301, 302, 311, 312, 320, and 365.
2. Twenty hours of supporting course work: (A) Western civilization. All students will complete either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours). (B) 12 to 14 additional hours outside of German language and literature selected in consultation with an adviser. The study of other literatures in their original languages is recommended.

#### Language and Literature Option

Designed as a traditional study of German, providing students with a balanced knowledge of German language, literature, and civilization.

1. Twenty-nine hours in German, including GER 211, 212, 231, 232, 301, 302, 311, 312, 320, and 365.

2. Twenty hours of supporting course work: (A) Western civilization. All students will complete either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours). (B) 12 to 14 additional hours of course work outside of German language and literature selected in consultation with an adviser.

### **Language Studies Option**

Designed to acquaint students with the structure and development of Germanic languages.

1. Twenty-nine hours in German, including GER 211, 212, 231, 232, 301, 302, 311, 312, 320, and 365.
2. Twenty-four to 26 hours of supporting course work: (A) Western civilization. All students will complete either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours). (B) At least 18 additional hours, including GMC 367, SCAN 101 and 102, LING 300 and one additional linguistics course, and ENGL 303.

### **Modern German Studies Option**

Designed to provide students with an understanding of present-day civilization and culture in German-speaking countries of Central Europe.

1. Twenty-nine hours in German, including GER 211, 212, 231, 232, 301, 302, 320, 365, and two of the following: 330, 331, 332, 335.
2. Twenty hours of supporting course work: (A) Western civilization. All students will complete either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours). (B) 12 to 14 additional hours outside of German language and literature. This course work may be fulfilled in the departmental study program in Baden, Austria; in an approved program in another German-speaking country; or on campus.

### **Scandinavian Studies Option**

Designed for students who will be able to spend a year abroad studying in Scandinavia.

1. Twelve hours in Scandinavian beyond SCAN 101-104. Scandinavian courses in translation are acceptable.
2. Twenty-four hours of study abroad in Scandinavian studies through an approved LAS 299 program (in, for example, language, literature, history, art, political science, or linguistics). Nine additional hours of supporting course work outside of Scandinavian studies must be selected in consultation with an adviser; these hours will include the Western civilization requirement that is satisfied by completing either HIST 111 and 112 (8 hours) or C LIT 141 and 142 (6 hours).

**Year Abroad Program.** See page 246.

**Departmental Distinction.** Students majoring in the Department of Germanic Languages and Literatures are urged to consult the departmental honors adviser by the second semester of the junior year for information pertaining to senior honors work and honors awards in the department.

## **History**

History courses: 30 to 34 hours (including 100-level survey sequence[s])

Supporting course work: 20 hours (chosen in consultation with an adviser)

Students in the history major should acquire a broad background from the study of the human experience in different cultures and time periods. A wide distribution of courses is therefore advisable; this is especially true for those who wish to enter teaching, government service, or professional schools for law, social work, museum and library science, business administration, or labor and industrial relations.

### **REQUIREMENTS**

1. A prerequisite to the advanced work in history is one freshman-sophomore survey sequence (HIST 111-112, 131-132, 151-152, 168 and 170, 173-174, 175-176, or 181-182).
2. A second freshman-sophomore sequence may also be taken, but at least 18 of the required hours of history courses must be at the 200 and 300 level.
3. One of the courses, at any level, must be in a pre-modern period of history.
4. The history courses must include at least 12 hours in an area of specialization and at least 6 hours in a second area. The following areas may be selected: ancient, medieval, and Renaissance (Europe); modern Europe since 1600 (including Russia); the United States and Latin America; Africa and the Near and Middle East; South, Southeast, and East Asia. With the approval of the departmental adviser and in consultation with a sponsoring professor,



a student may develop before the beginning of the senior year a special topical, geographical, or chronological area of concentration (for example, prelaw, Latin American studies, or the world from 1789 to 1914).

5. HIST 298 must be taken as part of the 30 to 34 hours required.
6. At least 20 hours of supporting course work must be taken outside the history department. Students who have not had HIST 111 and 112 must take C LIT 141 and 142. Twelve of the 20 hours of supporting courses must be at the 200 and 300 level. Traditional areas for such work are ancient and modern languages (excluding the first-year elementary courses and also excluding the second-year courses if those courses are being used to fulfill the language requirement in the College of Liberal Arts and Sciences), anthropology, art history, classical archaeology and civilization, economics, English, American and comparative literature, geography, library science, music history, philosophy, political science, psychology, religious studies, and sociology. Nonhistory courses chosen from the multidisciplinary fields of women's studies, African studies, Asian studies, Latin American studies, Russian language and area studies, medieval civilization, Renaissance civilization, American civilization, and cinema studies are also accepted as supporting course work if they meet the criteria of relevance and academic level. History of science students and premedical and pre dental students may offer work in the physical and life sciences. All supporting course work should be related by time, area, and/or topic to the major and is subject to the approval of the history department adviser.

For details on the major in history and the honors program, see the adviser in 300 Gregory Hall.

**Departmental Distinction.** To be eligible for distinction, a student must have at least a 4.5 grade-point average, complete a senior thesis, and receive the approval of an examining committee. The examining committee will determine the level of distinction to be awarded.

## Humanities

Requirements: At least 45 to 51 hours

Humanities departments in the College of Liberal Arts and Sciences, in addition to their own disciplinary majors, have developed and sponsor an interdisciplinary program of study, which encompasses several distinct programs designed to acquaint students in a coherent manner with topics that cross disciplinary boundaries. At present, the major in humanities includes program options in American civilization, cinema studies, history and philosophy of science, medieval civilization, and Renaissance studies. Because it is not possible to offer options in all specialties or topics of humanistic study, students whose interests do not coincide with one of the specific options are encouraged to consult with the school office and to consider developing their own programs through the Individual Plans of Study (IPS) major. Enrollment in the major in humanities requires election of one of the options.

Each option of the major in humanities is supervised by a committee of faculty members whose own scholarship and educational interests have involved them in interdisciplinary teaching and research. An adviser for students is available in each option and is responsible for approving students' plans of study. Action on matters other than course selection is taken by the committee.

## MAJOR

Enrollment in a major requires the following:

1. Elect one of the options offered within the major in humanities and file an option declaration with the LAS humanities office no later than the end of the first semester of the junior year. Students who do not begin work on option requirements by the junior year will be at a disadvantage.
2. Select specific courses counted toward completion of an option with the advice and approval of the option adviser. Any coherent program is acceptable, subject to specific option requirements developed in consultation with the option adviser.
3. For the elected option, complete the stated minimum number of hours (which will be at least 45 hours) in courses applicable toward the major and in accord with the distribution requirements listed below (a, b, and c); at least 25 hours must be at the 200 and 300 level.  
*NOTE:* Some course selections may require prerequisite courses. Total hours will most likely be in excess of the 45-hour minimum; however, most students will complete two or perhaps three college general education distribution requirements in the process.

- a. Complete at least 36 hours of topically oriented course work with at least 6 hours in each of three different departments or programs. Courses must be selected in consultation with an adviser.
- b. Complete a junior seminar and tutorial of at least 3 hours in the elected option.
- c. Complete a senior seminar and tutorial or senior thesis of at least 3 hours as specified in the elected option.

## OPTIONS

### American Civilization Option

This option offers a comprehensive introduction to the study of American civilization primarily through the study of art, history, literature, philosophy, and the social sciences.

#### REQUIREMENTS (48 hours)

- a. Two introductory courses of at least 3 hours each chosen with the approval of the option adviser; the introductory courses should provide a broad overview of the development of American culture; for example, HUMAN 141 and 142.
- b. At least 9 additional hours selected from among the following: ENGL 249, 255, 259, 260, 347, 350, 351, 362.
- c. At least 9 hours selected from among the following: HIST 260-262, 354-360, 362-364, 367-374.
- d. At least 6 hours selected from among the following: ARCH 315, 316; ARTHI 346, 350, 351; PHIL 313, 316, 323.
- e. At least 12 additional hours selected in consultation with the option adviser from courses offered in the departments of anthropology, economics, geography, political science, and sociology.
- f. Substitutions for any of the above specific courses may be permitted with the approval of the option adviser.
- g. At least 3 hours in HUMAN 297—Junior Seminar and Tutorial.
- h. At least 3 hours in the senior tutorial and seminar (HUMAN 298).

### Cinema Studies Option

This option offers an interdisciplinary introduction to the study of film from various literary, cultural, and social perspectives. The emphasis is on developing methods and skills of critical interpretation, but students are also encouraged to acquire basic competence in the technical aspects of film making by completing at least one course in cinematography. The option's underlying aim is to enrich the individual by exposure to the most significant patterns, philosophies, and artifacts of history and of narrative and dramatic expression.

#### REQUIREMENTS (51 hours)

- a. Acquire a knowledge of at least one foreign language sufficient to the student's program in film studies. In most cases, this requirement will exceed the college foreign language requirement by 6 semester hours of study. The language and the level of proficiency will be determined in consultation with the option adviser.
- b. ENGL 104—Introduction to Film
- c. HUMAN 261 and 262—a two-semester general survey of world film
- d. HUMAN 361—Film Theory and Criticism
- e. At least one course in film making: ARTCI 180, 280, or 380, or equivalent.
- f. Substitutions for specific courses listed above will be approved by the option adviser only in exceptional cases.
- g. At least 18 additional hours in film courses offered in individual departments in the humanities. At least 9 of these hours must be in courses offered in foreign language departments, and at least two languages must be represented in the total.
- h. At least 12 additional hours of cinema-related courses in one or more of the following general fields: aesthetics, art or architectural history, communications, criticism, cultural anthropology, foreign language studies, linguistics, literature (fiction and/or drama), modern history, music, philosophy, photography, theatre. Specific courses and sequences in these fields are to be approved at the discretion of the option adviser, except that courses eligible to satisfy requirement (g) may not be approved under requirement (h).
- i. Three hours in HUMAN 297—Junior Seminar and Tutorial. This course will involve an independent research project in a field of cinema defined by the student and the submission of a substantial piece of writing growing out of this research.
- j. Three hours in HUMAN 298—Senior Seminar and Tutorial. This course will involve the completion of a significant paper somewhat comparable to a senior honors thesis.



### History and Philosophy of Science Option

This option is designed to allow students to combine the study of science (including mathematics), the history of science, and the philosophy of science in an integrated program. Within the framework of specific requirements, an individual program of study will be designed to fit the student's particular interests.

#### REQUIREMENTS (45 hours)

- a. At least 15 hours from among the following with at least 6 hours in Group I and 6 hours in Group II:  
 Group I: PHIL 270, 317, 318, 319, 371.  
 Group II: HIST 247, 248, 249, 338; CHEM 390; PSYCH 360. Substitutions for the above specific courses may be permitted with the approval of the option adviser.
- b. At least 24 hours of course work in a single discipline selected from the following: biology; ecology, ethology, and evolution; entomology; genetics and development; microbiology; physiology; plant biology; astronomy; biochemistry; chemistry; chemical engineering; geology; mathematics; physics. In consultation with the option adviser, a student may design an interdepartmental program of science courses; in this case, at least 6 of the 24 hours must be at the 300 level.
- c. At least 3 hours in HUMAN 297—Junior Seminar and Tutorial.
- d. At least 3 hours in HUMAN 298—Senior Seminar and Tutorial.

### Medieval Civilization Option

This option is intended to introduce students to medieval culture, provide them with a sense of periods, names, ideas, and movements in sequence, and thus give them a synoptic view of the field. A student whose interests are primarily literary should consult with an adviser in comparative literature or in one of the language and literature departments. The required courses are designed to encourage students to read medieval texts, insofar as practical, in the manner in which medieval university students would have read them. In addition, a certain amount of training in the reading and interpretation of medieval documents and in the study of Latin and the medieval vernacular languages will bring students closer to the thought of the period.

#### REQUIREMENTS (45 hours)

- a. Acquire a reading knowledge of a foreign language relevant to the student's interests in medieval civilization. In most instances, this requirement will coincide with the college foreign language requirement. The language should be selected in consultation with the option adviser.
- b. Complete two introductory courses of at least 3 hours each selected in consultation with the option adviser.
- c. Complete two advanced-level topically oriented courses of at least 3 hours each selected in consultation with the option adviser. Selected courses should focus on a topic central to medieval civilization and should emphasize the international cultural and social unity of medieval civilization; sample topics include medieval vernacular literatures, mythology, the Bible and medieval exegesis, iconography, paleography and the medieval book, cosmography, geography in the Middle Ages, and the influence of Islam. Departmental courses, such as HIST 331 or 332 and CLCIV/SPCOM 315, or special topics courses, such as HUMAN 295, may be used to complete this requirement; but courses must be selected with the adviser's approval.
- d. Complete 27 hours of medieval-related course work selected in consultation with the option adviser from the departments of art history, history, literature, music, philosophy, and religious studies.
- e. Complete at least 3 hours of HUMAN 297—Junior Seminar and Tutorial. The medieval civilization topic of HUMAN 297 will require an ability to read primary and secondary sources in a foreign language.
- f. Complete at least 3 hours of HUMAN 292—Senior Thesis. The thesis should ordinarily be in one of the following areas: art, medieval Latin literature, vernacular literature, liturgy and worship, philosophy and theology, history, science.

### Renaissance Studies Option

This option incorporates course work in the Renaissance and related periods and places an emphasis on independent study and the completion of research papers in the junior and senior years.

**REQUIREMENTS (45 hours)**

- Complete a minimum of 15 hours of Renaissance-related course work in a single discipline at the 200 and 300 level from among the following: art, history, literature, or music.
- Complete at least 24 hours of Renaissance-related course work in the following areas with at least one course in each: art, history, music, philosophy, and literature. At least one of these courses must be in classical literature or culture.
- Acquire a reading knowledge of a foreign language relevant to the student's interests in Renaissance study, selected in consultation with the option adviser.
- Complete at least 3 hours in HUMAN 297—Junior Seminar and Tutorial, which will lead to the completion of a research paper that demonstrates an ability to initiate and complete a thorough study of a topic on the Renaissance. The successful completion of this paper is a prerequisite to Human 298.
- Complete at least 3 hours in HUMAN 298—Senior Seminar and Tutorial, which will lead to the completion of a significant research paper.

**Departmental Distinction.** To be eligible for graduation with distinction, a student must have a college grade-point average of 4.5 and an option grade-point average of 4.75 and must complete an additional one-semester course, independent study, or thesis. See the option adviser for details.

**Individual Plans of Study (IPS)**

Students in the College of Liberal Arts and Sciences may choose any of the seventy different undergraduate degree programs offered within the college. These majors and specialized curricula, each with its own pattern of requirements and electives, are continuously reviewed by the sponsoring departments and the college and revised as needed. At the same time, it is not possible to anticipate or specify all possible undergraduate fields of study. So, in order to encourage the growth of new academic disciplines, the college sponsors the experimental major—the Individual Plans of Study program. IPS, initiated in 1971, allows the student to create an original major more appropriate for the individual's educational needs and characterized by a unique pattern of upper-level courses with a new academic direction.

The development of an IPS program begins with the student's perception that a more appropriate field of study could exist beyond the present majors. Consultation with the secretary of the IPS advisory committee and with faculty members in related fields will soon establish whether an original major is appropriate. Then, with the cooperation of one or more faculty members who consent to serve as advisers for this IPS program, an IPS major is planned and justified as carefully as if this were a departmental major. Although an IPS program is usually interdisciplinary, combining courses from several departments and even colleges, the IPS program is part of the sciences and letters curriculum. Thus, students are required to satisfy the sciences and letters requirements of rhetoric, general education, foreign language, and advanced hours; they must also complete at least 120 semester hours and satisfy the residence requirement.

Once an IPS program is formulated, the student and adviser make formal application to the IPS advisory committee, which evaluates and decides whether a proposed IPS program is appropriate for the aims of both the student and the college.

Students interested in IPS are encouraged to inquire at 912 South Fifth Street, Champaign, IL 61820, 333-4710, as early as possible in the sophomore year. In all cases, IPS programs must be initiated and approved before the end of the student's junior year.

**Departmental Distinction:** To graduate with distinction, a student must (1) have a cumulative grade point average of at least 4.25 (A = 5.0), and (2) successfully complete a project that has been approved by the IPS advisory committee. Further information on requirements for graduation with distinction may be obtained from the secretary of the IPS advisory committee.

**Italian**

This major is sponsored by the Department of Spanish, Italian, and Portuguese. See page 290.

**Latin American Studies**

Requirement: At least 45 hours

A major in Latin American studies provides an integrated exploration of a major world area. Depending upon the student's interests and career aspirations, individual programs of study are designed in close consultation with the student adviser in the Center for Latin American



and Caribbean Studies. All study programs should reflect an integrative, cross-disciplinary approach, and courses must be taken in at least three of these five areas or perspectives: 1) anthropological and geographical; 2) historical; 3) humanistic; 4) social, political, and economic; 5) ecological and environmental.

Students are also expected to demonstrate a substantial command of a Latin American language (Spanish, Portuguese, or Quechua), either through course work or by passing a proficiency examination. Students majoring in Latin American studies are urged to include, during the summer or regular academic year, a period of study abroad in Latin America.

## REQUIREMENTS

The major consists of a minimum of 45 semester hours of course work as follows:

1. LA ST 170 (3 hours), normally taken in the freshman or sophomore year.
2. LA ST 290 (3 hours), a one-semester tutorial, normally taken in the senior year.
3. Completion of 33 semester hours of approved courses with Latin American content. Of these, 12 semester hours must be in courses in one of the following perspectives, and 9 semester hours in each of two other perspectives, as follows:
  - a. Anthropological and Geographical Perspective. Normally courses in anthropology and geography.
  - b. Historical Perspective. Normally courses in history.
  - c. Humanistic Perspective. Normally courses in Spanish and Portuguese literature, comparative literature, linguistics, art history, and music.
  - d. Social, Political, and Economic Perspective. Normally courses in sociology, rural sociology, political science, economics, and agricultural economics.
  - e. Ecological and Environmental Perspective. Normally courses in biology, forestry, and physical anthropology (primatology).
  - f. When appropriate, approved courses with Latin American content in other scientific and professional areas may be substituted for courses in the five perspectives listed above with the consent of the adviser in the Center for Latin American and Caribbean Studies.
4. Two courses (5 or 6 semester hours) in advanced conversation and composition in a Latin American language (Spanish, Portuguese, or Quechua) beyond the level specified by the LAS language requirement, or the equivalent as demonstrated by special examination. Students successfully completing the examination are expected to use these 5 or 6 hours in approved courses of Latin American content from any of the above perspectives (including literature courses). At the end of their language study, all students are urged to take an oral proficiency test based on ACTFL guidelines.
5. Each student's course of study is devised in consultation with the adviser in the Center for Latin American and Caribbean Studies and is subject to the adviser's approval.

**Departmental Distinction.** To be eligible, a student must achieve at least a 4.5 grade-point average in the major, complete a senior thesis, and receive the approval of the center's research committee.

## Life Sciences<sup>1</sup>

**(Including Bioengineering; Biophysics; Biology General; Biology Honors; Cell and Structural Biology; Ecology, Ethology, and Evolution; Entomology; Microbiology; Physiology; and Plant Biology)**

Requirements for all options: 38 to 42 hours as given below. (Advanced and additional requirements vary according to option.)

Mathematics: 5 hours of calculus

Chemistry: 13 to 15 hours of chemistry through organic chemistry

Biology: 10 hours of introductory biology

Physics: 10 or 12 hours of general physics

The School of Life Sciences (SOLS) departments have cooperated in developing a major in life sciences with a number of different options suitable for students with different educational objectives. Because of the interdependency of the biology subdisciplines and their reliance on the physical sciences, all undergraduates in this major are required to have a strong background in cognate sciences and broad exposure to biological materials, phenomena, and principles. Students who do not begin mathematics and chemistry in the freshman year generally will be at a disadvantage. In the advanced biological areas, students are expected to gain experience with living systems at the molecular, cellular, organismic, population, and community levels. The ways of achieving this training differ by option.

**NOTES:**

- Each student is required to complete all requirements of an elected option to satisfy the requirements of the life sciences major.
- A student majoring in an undergraduate program in the School of Life Sciences may not apply toward graduation more than 15 hours of 100-level life science courses (including cross-listed courses on this campus and courses transferred from other institutions).
- Because of the overlap in requirements among the various options and because it is a *single* major with ten options, students may not declare multiple options or complete two majors within SOLS.
- The credit-no credit option is intended to encourage the exploration of subjects in which students have little background; that is, courses outside their major. Because of the extensive overlap of life and basic science requirements in the various options, students are not allowed to elect credit-no credit for any courses offered by, or cross listed by, the school.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

---

**OPTIONS****Bioengineering Option<sup>1</sup>**

Life science courses: 10 hours (300-level courses)

Basic science courses: 35 to 37 hours, plus 13 to 14 additional hours of mathematics

Bioengineering/engineering courses: minimum 15 hours

Administered by the Department of Physiology and Biophysics, the bioengineering option represents a broad, interdisciplinary field that brings together engineering, biology, and medicine to study basic biological phenomena and to create new techniques and devices to deal with specific medical problems. Its practice ranges from the fundamental study of the behavior of biological materials to the development of medical instruments.

Students in this option must obtain a strong background in mathematics, physics, and chemistry in addition to the biological sciences. A number of engineering course sequences are also required. Students with specific career objectives in mind should consult with their advisers as early as possible to choose appropriate courses.

Courses in addition to those listed below may be required for entrance into medical school or for graduate programs in engineering or the life sciences.

**REQUIREMENTS**

1. MATH 120, 132, 242, and 285; or MATH 135, 245, and 285
2. CHEM 131 and 134; preceded by CHEM 107, 108, 109, and 110, or 101-102
3. BIOL 110 and 111 (or approved equivalent)
4. PHYCS 106, 107, and 108
5. BIOPH 301 or PHYSL 301; PHYSL 302, 303, and 304
6. Five engineering and bioengineering courses (complete two or more of the following sequences):
  - Systems and modeling: BIOEN/EE 375; preceded by either EE 270 and EE 309, or EE 260 and GE 222
  - Bioinstrumentation: EE 260 or 270; EE 244, BIOEN 314 and 315
  - Biomaterials: BIOEN 308
  - Transport phenomena: BIOEN 370/TAM 393 (biofluid mechanics) or BIOEN 370/ME 393 (heat and transfer)
  - Ultrasonics: EE 373 and 374
  - Radiobiology: PHYSL 331
  - Computer programming: CS 101
  - Image processing: BIOEN 370D

**Recommended Supporting Course Work.** Physiology, biophysics, advanced engineering or physics courses, biochemistry, physical chemistry

**Departmental Distinction.** In addition to the above requirements, candidates must: enroll in BIOEN 270 and, working with a bioengineering faculty adviser, prepare a report based on laboratory or library research. This report will be submitted to a committee that will recommend the level of distinction.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

---



### Biology General Option<sup>1</sup>

Life science courses: 21 hours (200- and 300-level courses)

Basic science courses: 38 to 42 hours

This option provides maximum flexibility by allowing the student to design his or her own program. In selecting courses at the 200 and 300 level, the student should strike a balance between breadth and specialization. A student electing this option, therefore, must discuss this matter with his or her adviser and complete an approved plan in the school office before the end of the second semester of the junior year. The study plan may be revised with adviser approval.

#### REQUIREMENTS

1. MATH 120 or 135
2. CHEM 101 and 102, or CHEM 107-109 and 108-110; and CHEM 131 and 134, or CHEM 136 and 181
3. BIOL 110 and 111
4. PHYCS 101 and 102; or PHYCS 106, 107, and 108
5. Twenty-one additional hours in life sciences at the 200 level and above, including two field or laboratory courses. At least one course in each of the following four areas must be taken to fulfill the 21 hours required. These courses are to be selected in consultation with an adviser.
  - a. Population biology-ecology-ethology
  - b. Physiology-immunology
  - c. Genetics
  - d. Developmental morphology and anatomy

Special topics courses (BIOPH 290, CSB 290, EEE 290, ENTOM 290, G&D 290, MCBIO 290, PHYSL 290, PLBIO 290) will not satisfy the 21 hour requirement.

**Recommended Supporting Course Work:** Students are encouraged to elect individual study (BIOPH 290, CSB 290, EEE 290, ENTOM 290, G&D 290, MCBIO 290, PHYSL 290, PLBIO 290); additional calculus, statistics, and/or computer science; or biochemistry.

**Departmental Distinction.** To be eligible for distinction, a student must maintain a minimum grade-point average of at least 4.0, register with the biology distinction committee early in the senior year, and submit a report of an independent study project (courses numbered 290 or 292) one month prior to graduation for approval by the Biology Distinction Committee.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

### Biology Honors Option<sup>1</sup>

Life science courses: 14 hours (300-level courses)

Basic science courses: 38 to 42 hours, plus 6 additional hours of calculus, 3 to 4 hours of statistics

Supporting course work: 8 hours of biochemistry

This option, administered by the biology honors committee, is designed for superior students wishing to pursue an intensive introductory biology program and, concurrently, to gain a strong background in the physical sciences. The option provides preparation suitable for graduate and professional training in biology.

#### REQUIREMENTS

1. Admission by interview in spring of freshman year
2. MATH 242
3. CHEM 107-109, 108-110, and 136-181; or CHEM 101 and 102, and 136/181<sup>2</sup>
4. BIOL 151, 251, and 351 (instead of BIOL 110 and 111)<sup>3</sup>
5. PHYCS 106, 107, and 108
6. An approved 200- or 300-level course in statistics<sup>4</sup>
7. BIOCH 350 and 355, or BIOCH 352, 353 and 355
8. Ten hours of 300-level life sciences courses (other than BIOL 351 and 371), two of which may be in undergraduate research (290 and 292 rubrics)
9. A student consultation with the biology honors adviser at least once a semester

**Recommended Supporting Course Work.** A course in computer science (CS 101 or 121) is strongly recommended.

**Departmental Distinction.** In addition to meeting the above requirements, a candidate for distinction must:

1. Consult with the biology honors adviser early in the junior year,
2. Complete an undergraduate research project, and
3. Present an acceptable written report on the research to the biology distinction committee one month prior to graduation.

**NOTES:**

- No 100-level course in life sciences (other than BIOL 123 and 151) is acceptable.
- Advisers may not make any substitutions or other changes in the above requirements.
- Credit is not ordinarily given for 200-level life science courses (except BIOL 251 and independent study courses).

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

<sup>2</sup>The former sequence is recommended, and preference will be given in admission to students following it.

<sup>3</sup>Continuation in the biology honors option requires a grade of B or better in each of these courses.

<sup>4</sup>BIOL 371, AGRON 340, STAT 210/MATH 263, STAT 310/MATH 363, and MATH 361/STAT 351 are recommended, as is additional training in statistics. Suitable sequences for those taking more than a single course are BIOL 371 and 373; AGRON 340 and 440; and STAT 310-311/MATH 363-364.

---

### **Biophysics Option<sup>1</sup>**

Life science courses: 5 to 6 hours of biophysics

Basic science courses: 38 to 42 hours, plus 9 additional hours of mathematics

Advanced science courses: 12 hours

This option, administered by the biophysics division of the Department of Physiology and Biophysics, is designed for the student who wishes a strong background in the physical sciences and mathematics but is basically interested in the life sciences. It is designed to provide guidelines as to which physical and life science courses especially complement each other. Because of the many possible course choices available, it is important that a student within this option consult the option adviser throughout the entire undergraduate program.

#### **REQUIREMENTS**

1. MATH 120, 132, 242, and 285
2. CHEM 107, 108, 109, and 110<sup>2</sup>; CHEM 131 and 134, or CHEM 136 and 181
3. BIOL 110 and 111, or equivalent<sup>2</sup>
4. PHYCS 106, 107, and 108<sup>2</sup>
5. BIOPH 301, and one of BIOPH 302, 320, 332, 354
6. Twelve additional hours of 200- and 300-level work in offerings from life sciences, chemistry, biochemistry, physics, mathematics, or bioengineering

**Recommendations.** Advanced undergraduate courses highly recommended include:

1. BIOCH 350 (lecture) and 355 (laboratory)—Biochemistry
2. PHYCS 331 and 333—Electromagnetic theory
3. CHEM 344 or PHYCS 361—Thermodynamics and Statistical Mechanics
4. BIOL 210—Genetics
5. CHEM 342 or PHYCS 383—Atomic Physics and Quantum Theory
6. CHEM 346—Physical Chemistry of Macromolecules

The above listing of recommended courses is not intended to be limiting. The student should consult his or her faculty adviser about other advanced undergraduate supporting course work that may be taken toward fulfillment of the option requirement.

**Recommendations for Distinction.** To earn distinction in the biophysics option, the candidate must enroll in BIOPH 290 and, working with a biophysics faculty adviser, prepare a report based on theoretical or experimental research. This report will be submitted to a committee that will recommend the level of distinction to the faculty.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

<sup>2</sup>Students with alternative introductory sequences may petition for substitution.



## Cell and Structural Biology Option<sup>1</sup>

Advanced life science courses: at least 25 hours (200- and 300-level courses)

Basic science courses: at least 41 hours

Supporting course work: additional advanced life science courses

This option, administered by the Department of Cell and Structural Biology, is intended to provide broad undergraduate training for students specifically interested in cell structure and functions at the molecular, cellular, tissue, organ, or organismic levels. Emphasis will be placed on structure as related to function. A student who completes this option will be prepared to pursue a course of study for an advanced degree in an area such as molecular biology, cell biology, biochemistry, or anatomy, or for entry into a technical occupation in research, industry, or the health professions.

### BASIC SCIENCE REQUIREMENTS

1. MATH 120 (MATH 132 recommended)
2. CHEM 101 and 102 (or CHEM 107, 108, 109, and 110) and CHEM 131 and 134
3. BIOL 110 and 111 (or BIOL 151, 251, and 351)
4. BIOCH 350 (or BIOCH 352 and 353)
5. PHYCS 101 and 102 (or PHYCS 106, 107, and 108)

### ADVANCED LIFE SCIENCE REQUIREMENTS

6. BIOL 210 (Genetics)
7. CSB 300 and 301 (Cell Biology, I and II)
8. A minimum of 13 hours of credit from the following courses:  
(at least 10 of these hours must be in courses with the CSB rubric)
  - ANTH 356 (Human Osteology)
  - ANTH 394 (Human Paleopathology)
  - BIOCH 355 (Biochemistry Laboratory)
  - BIOL 303 (Introduction to Neurobiology)
  - BIOL 305 (Fundamentals of Microscopy)
  - BIOL 313 (Experimental Genetics)
  - BIOPH 301 (Introduction to Biophysics)
  - CSB 211 (Developmental Biology)
  - CSB 213 (Cells and Tissues)
  - CSB 234 (Functional Human Anatomy)
  - CSB 307 (Functional Neuroanatomy)
  - CSB 308 (Immunology)
  - CSB 312 (Developmental Genetics)
  - CSB 315 (Human Genetics)
  - CSB 319 (Vertebrate Histology)
  - EEE 232 (Comparative Vertebrate Anatomy)
  - MCBIO 317 (Experimental Techniques in Molecular Biology)
  - MCBIO 319 (Yeast Cell Biology)
  - MCBIO 327 (Immunochemistry)
  - MCBIO 330 (Molecular Biology of Microorganisms)
  - PHYSL 301 (Cell and Membrane Physiology)
  - PHYSL 302 (Systems and Integrative Physiology)
  - PHYSL 303 (Cell and Membrane Physiology Laboratory)
  - PHYSL 304 (Systems and Integrative Physiology Laboratory)
  - PHYSL 316 (Integrative Neurophysiology)
  - PLBIO 338 (Plant Molecular Biology)
  - PLBIO 339 (Experimental Techniques in Plant Molecular Biology)

**Independent Study.** Students with research interests are encouraged to take CSB 290 (Independent Study), which may be repeated to a maximum of 10 hours. These hours do not count as part of the 25 hours of required life sciences course hours.

**Departmental Distinction.** To be eligible for departmental distinction, a student must have at least a 4.0 average, enroll in CSB 290, register with the CSB Distinction Committee early in the senior year, and submit a research report approximately one month prior to graduation for approval by the CSB Distinction Committee.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

### Ecology, Ethology, and Evolution Option<sup>1</sup>

Life science courses: 20 hours (200- and 300-level courses)

Basic science courses: 38 to 42 hours

This option, administered by the Department of Ecology, Ethology, and Evolution, is intended to provide undergraduate training for life science majors who have a special interest in the closely related areas of animal ecology, behavior, and evolution. A student completing this option will be prepared to pursue an advanced degree in ecology, ethology, and evolution or to compete for jobs in zoos, governmental agencies (such as departments of conservation and environmental protection agencies), environmental consulting firms, and pest management firms. Because of the broad scope of this option and the numerous relevant courses, specific course requirements are few. The student, in consultation with an option adviser, should develop a program in biology with supporting course work in geology, geography, psychology, and related areas. Suggested course work for specialized programs can be obtained from the department.

#### REQUIREMENTS

1. MATH 120 or 135
2. CHEM 101 and 102, or CHEM 107-109, 108-110; CHEM 131 and 134, or CHEM 136 and 181
3. BIOL 110 and 111
4. PHYCS 101 and 102; or PHYCS 106, 107, and 108
5. EEE 212, 301, and 346; and BIOL 210
6. At least 5 additional life science hours at the 200 level or above, chosen in consultation with an adviser

**Recommended Supporting Course Work.** Courses in statistics (BIOL 371) computer science (CS 103), and biochemistry (BIOCH 350).

**Departmental Distinction.** To be eligible for distinction, a student must maintain at least a 4.0 grade-point average (4.25 in option requirements), complete a research project, including at least two hours of EEE 290, and submit an acceptable research report.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

### Entomology Option<sup>1</sup>

Life science courses: 20 hours (200- and 300-level courses)

Basic science courses: 38 to 42 hours, including 3 to 4 hours of statistics

This option is intended to provide undergraduate training to the life science major who is interested in a career in entomology in an academic, governmental, or industrial setting. Opportunities are provided within the option for students to obtain a broad science background for advanced work and to obtain exposure to a wide variety of entomological specializations.

#### REQUIREMENTS

1. MATH 120 or 135
2. CHEM 101 and 102, or CHEM 107-109, 108-110; and CHEM 131 and 134, or CHEM 136 and 181
3. BIOL 110 and 111
4. PHYCS 101 and 102; or PHYCS 106, 107, and 108
5. ENTOM 301 and 302, plus one additional 300-level entomology course
6. A course in statistics
7. Eleven hours of additional life science courses chosen in consultation with an entomology adviser

**Recommended Supporting Course Work.** Undergraduate research (ENTOM 290) directed by a member of the Department of Entomology.

**Departmental Distinction.** A candidate must maintain a 4.0 grade-point average overall (4.5 in the entomology option) and complete an undergraduate thesis based on a project agreed upon with the departmental adviser (minimum of 4 hours of credit in ENTOM 290). The departmental distinction committee shall, upon approval of the thesis, determine the level of distinction. See the adviser for details at the beginning of the junior year.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.



### Microbiology Option<sup>1</sup>

Microbiology courses: at least 21 hours (200- and 300-level courses)

Supporting course work: at least 51 hours of mathematics and science courses

This option is intended to provide a strong educational background in microbiology and its supporting disciplines. Students satisfying the requirements of the microbiology option may expect to be well prepared for additional study toward higher degrees or for entry into a wide variety of technical occupations, including research, health services, and industrial and agricultural activities. Students may design their study programs to extend their experience in genetics or other areas of biology, in biochemistry or other areas of chemistry, or in the social and economic aspects of microbiology.

#### REQUIREMENTS

1. MATH 120, and one of the following: MATH 132, 161, BIOL 371, or CS 101
2. CHEM 101 and 102, or CHEM 107, 108, 109, and 110
3. CHEM 131 and 134
4. BIOL 110 and 111
5. BIOCH 350, or BIOCH 352 and 353
6. BIOCH 355 (preferable) or CHEM 122
7. PHYCS 101 and 102, or PHYCS 106, 107, and 108
8. BIOL 210
9. MCBIO 200 and 201
10. At least 15 hours of 300-level microbiology courses, including at least one course from each of Groups I, II, and III, and including at least two laboratory courses from Group IV.
  - Group I: MCBIO 316, 319, 330
  - Group II: MCBIO 309, 331, 351
  - Group III: MCBIO 311, 326, 327
  - Group IV: MCBIO 312, 313, 317, 327, 328

**Recommendation.** Independent laboratory study (MCBIO 290 or 292) is recommended, but not required. Three hours or more of MCBIO 290 or 292 may replace one of the laboratory courses in Group IV, but at least 15 hours of 300-level microbiology courses must be completed.

**Departmental Distinction.** In addition to meeting the above requirements, a candidate for distinction must submit a satisfactory senior research thesis (MCBIO 292) and maintain a minimum grade-point average of 4.5 (A = 5.0) when fulfilling all the requirements. Contact the microbiology undergraduate adviser at the midpoint of the junior year. The department recognizes a single level of distinction.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

### Physiology Option<sup>1</sup>

Life science courses: 23 hours minimum (200- and 300-level courses)

Basic science courses: 38 to 42 hours, plus 6 additional hours of calculus

Supporting course work: 3 hours of biochemistry

Physiology is a subdivision of experimental biology that is concerned with the analysis of function in living cells or organisms with particularly strong emphasis on regulation and integration. Specialties within the field include subjects related to behavior (integrative neurophysiology), the relations of lower organisms with their environment (comparative physiology or physiological zoology), the relations of the human species with its environment (ergonomics and human physiology), interrelations between and functioning of organ systems in the whole organism (mammalian physiology), and the fundamental molecular and cellular mechanisms of life (cell physiology and biophysics).

Numerous choices must be made among the physical sciences, physiology, and related areas of biology. Therefore, it is essential that a student majoring in physiology consult with his or her adviser as early as possible and at frequent intervals. In addition to offering counsel for making these choices, the adviser is also the proper person to approve any substitutions in the following curriculum:

#### REQUIREMENTS

1. MATH 120, 132, and 242; MATH 135 and 245, or equivalent

2. CHEM 107-109 and CHEM 108-110 (CHEM 101 and 102 acceptable); and CHEM 131 and 134
3. BIOCH 350, or BIOCH 352 and 353
4. BIOL 110 and 111, or approved equivalent
5. At least one year of physics (PHYCS 101 and 102 acceptable; PHYCS 106, 107, and 108 recommended)
6. BIOL 210 or approved equivalent
7. PHYSL 301, 302, 303, and 304 (PHYSL 290 research, BIOCH 355, or another laboratory course in physiology may be substituted for either PHYSL 303 or 304, but not both)
8. A minimum of 9 additional advanced hours in physiology or biophysics chosen from the following:  
     Biophysics: 301, 302, 354  
     Physiology: 312, 316, 331, 341

**Recommended Supporting Course Work.** The following courses are recommended:

*Behavioral biology:* BIOL 303, 304; EEE 212, 340, 346, 347, 350, 353, 354; Psych. 210, 217, 320, 343

*Cellular and molecular biology:* BIOL 213, 303, 307, 309, 324; CHEM 346; CSB 312; MCBIO 200, 326, 330, 331; PHYCS 350; PLBIO 335

*Organismic biology:* BIOL 303, 304, 309, 324; BIOEN 375; CSB 211, 312; EEE 232, 340; ENTOM 301; PSYCH 210; PLBIO 330, 345

*Quantitative biology:* BIOL 371, 372, 373; BIOEN 308, 314, 315, 375; CHEM 346; GE 222; PHYCS 350; PSYCH 320

**Departmental Distinction.** A candidate for distinction must enroll in PHYSL 292 and, working with a departmental adviser, prepare a report based on laboratory or library research. This report will be submitted to a committee which will recommend the level of distinction.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.

### Plant Biology Option<sup>1</sup>

Plant biology courses: at least 21 hours (200- and 300-level courses)

Basic science courses: 38 to 42 hours

Supporting course work: 10 hours chosen in consultation with an adviser

This option provides training for the student who seeks a broad plant biology background in preparation for advanced work in plant biology or applied plant sciences. It provides opportunity for study of a wide variety of basic and applied specializations.

#### REQUIREMENTS

1. MATH 120 or 135.
2. CHEM 101 and 102; or CHEM 107, 108 109, and 110.
3. CHEM 131 and 134.
4. PLBIO 100 and one additional lecture-laboratory course in life sciences; or BIOL 110 and 111.
5. PHYCS 101 and 102; or PHYCS 106, 107, and 108.
6. One course in each of the following five areas of study:
  - a. Plant evolution and systematics (PLBIO 260 or PLBIO 304)
  - b. Genetics and molecular biology (BIOL 210).
  - c. Plant physiology and biochemistry (PLBIO 330).
  - d. Plant anatomy and development (PLBIO 335 or PLBIO 345).
  - e. Plant ecology (PLBIO 381).
7. Individual study (PLBIO 290 or 292) during the junior or senior year
8. Supporting courses: At least 10 hours of courses selected in consultation with a faculty adviser from the following: agronomy, biochemistry, biology, chemistry, entomology, forestry, geography, geology, horticulture, mathematics, microbiology, physics, physiology, and plant pathology. Other fields may be considered through consultation with a faculty adviser.

**Departmental Distinction.** In addition to meeting the requirements above, a candidate for distinction must maintain a grade-point average of 4.25 overall and 4.5 in life science courses and submit a satisfactory senior thesis (PLBIO 292). Contact the plant biology undergraduate adviser by the junior year for details. The department recognizes a single level of distinction.

---

<sup>1</sup>A revision of the life sciences major not reflected in this statement was being processed at the time of publication and may be in effect by August 1991. Please see an adviser for more information.



## Linguistics

Linguistics courses: 30 hours

Supporting course work: 6 to 8 hours of Western civilization, plus 14 hours chosen in consultation with an adviser.

The Department of Linguistics offers undergraduate instruction of two types.

1. General linguistics courses have two purposes: they are intended to prepare students for various careers in which the scientific study of language is of significance; they are, furthermore, the basis for continued professional training toward the M.A. and Ph.D. degrees in this field.
2. Non-Western language courses are offered regularly in Arabic, Hebrew, Hindi, Persian, and various African languages (Hausa, Lingala, Swahili, Wolof). One language, Hebrew, may be taken as an option of the major (see Option 2 below).

### REQUIREMENTS AND OPTIONS

#### General Linguistics Option

**Linguistics Courses.** 30 hours, including LING 200, 225, 300, 301, and 302. The remaining core courses are to be selected from among other 200- and 300-level courses. Students are expected to take two additional courses in each of two special areas of linguistics, such as psycholinguistics, applied linguistics, sociolinguistics, mathematical and computational linguistics, non-Western language structure, and area linguistics (African, Classics, Far Eastern, Germanic, Indo-European, Romance, Semitic, Slavic, South Asian).

**Supporting Course Work.** 14 hours, in linguistically relevant courses in any one or more of the following disciplines: anthropology; classics; computer science; English; English as an international language; French; Germanic; philosophy; psychology; Slavic; Spanish, Italian, and Portuguese; speech and hearing science; and speech communication. In addition, students are encouraged to take two years of a second foreign language in addition to the language used to satisfy the college foreign language requirement. This second language may be either a Western or non-Western language. Each student's program, including the selection of the special areas and second language credit, is to be worked out in consultation with the departmental adviser.

**Western Civilization.** 6 to 8 hours of western civilization (HIST 111 and 112, or C LIT 141 and 142).

#### Hebrew Language and Linguistics Option

This option provides the student with a broad knowledge of the Hebrew language, both modern and biblical, as well as with introductory training in general linguistics.

**Hebrew Language Courses.** 30 hours, including LING 200 and one other course in linguistics; HEBR 305, 306, 307, and 308; and 8 hours of biblical Hebrew, chosen from HEBR 205, 206, 210, 311. All substitutions must be approved by the coordinator of the option.

**Supporting Course Work.** 14 hours, which should constitute a coherent program complementing the major in Hebrew language and linguistics. Possible supporting courses include Jewish culture and society, biblical literature, anthropology, classics, and additional languages. The program of supporting course work will be planned by the student in conjunction with the Hebrew language coordinator.

**Western Civilization.** 6 to 8 hours of Western civilization (HIST 111 and 112 or C LIT 141 and 142).

**Departmental Distinction.** Candidates for the degree with distinction must register their candidacy with their advisers no later than the beginning of the second semester of the junior year. The student must achieve a grade-point average of at least 4.4 (A = 5.0) for the required 30 hours in linguistics, including at least 4 hours of credit for individual study. For graduation with high or highest distinction, the student must satisfy the same minimum requirements, plus submit a senior honors thesis to the Department of Linguistics by the first day of the month preceding the month of graduation.

## Mathematics (Majors in Actuarial Science, Mathematics, and Mathematics and Computer Science)

### Actuarial Science

Mathematics courses: 27 hours beyond the calculus

Finance courses: 12 hours

Supporting course work/prerequisites: 10-11 hours of calculus and 3-4 hours of computer science

The major is designed to prepare students to enter the actuarial profession.

#### REQUIREMENTS

1. Calculus through MATH 242 or 245, or equivalent
2. CS 101, 105, or 121, or equivalent
3. MATH 210, 308, 309, 369
4. MATH 315 or 383
5. One of the following: MATH/CS 257, MATH 370, 376, 393, 394, or 383 (if not used to satisfy requirement #4), or ECON 372
6. MATH 371, and either 372 or one of: MATH 313, 318, 344, 347, 358, 365, 368, 384; CS 225, 232, 300 (replacement for MATH 372 needs adviser approval)
7. Four finance courses chosen, in consultation with an adviser, from FIN 235, 237, 254, 260, 262, 360, 363, 370, 371

**NOTE:** The student is urged to elect ACCY 200 or 201, or B ADM 261, in the junior or senior year.

**Departmental Distinction.** To qualify for distinction, the student must take MATH 372, have a grade-point average in mathematics courses of at least 4.25, and pass at least six hours of examinations offered by the professional actuarial societies. To qualify for high or highest distinction, the student must have passed at least eight hours of professional exams, with highest distinction going to those whose grade-point averages in mathematics are at least 4.75. Finance courses and additional professional exams may also be given consideration in close decisions.

### Mathematics<sup>1</sup>

Mathematics courses: 24 to 30 hours beyond calculus

Supporting course work/prerequisites: 10 or 11 hours of calculus, 3 or 4 hours of computer science, and 8 to 10 hours of supporting courses chosen in consultation with an adviser

Mathematics is a broad discipline that contains a range of areas of specialization within it. The required courses in Part I provide fundamental background for mathematics in general. The options in Part II indicate several directions that can be taken in mathematics. Also see the sections on majors in actuarial science, mathematics and computer science, and statistics, and the curriculum in the teaching of mathematics.

An entering student in mathematics should have academic preparation to enroll in MATH 120 during the first semester. Admission to MATH 120 requires a passing grade on the mathematics placement test. A student should attain at least a 3.5 average in calculus courses if he or she expects to complete the advanced courses in the program successfully.

#### REQUIREMENTS

**Part I:** The following are required of all students:

1. Calculus through MATH 242, 245, or equivalent
2. CS 101 or 121—computer science
3. MATH 247—Intermediate Analysis
4. MATH 317—Introduction to Abstract Algebra
5. MATH 315 or 318—linear algebra
6. MATH 344 or 347—real analysis
7. MATH 361/STAT 351 or MATH 363/STAT 310—probability-statistics

**Part II:** In addition, one of the following options must be completed:

#### OPTIONS

##### General Mathematics Option

This option permits emphasis in a variety of directions. The selection of mathematics courses and related supporting courses can provide preparation for work in economics, geology, psychology, physics, and many other fields in business, industry, and government.

1. Three additional advanced mathematics courses
2. At least 10 hours of supporting courses in another subject



### Graduate Preparatory Option

This option is for students who intend to continue their studies in graduate school. Different areas of mathematics can be emphasized. For example, students who have an interest in physical applications should take MATH 341 and 342—differential equations and supporting course work in physics. Students interested in discrete mathematics should take MATH 313—Combinatorial Mathematics and MATH 312—Graph Theory and Its Applications. Other areas are also possible.

1. MATH 318 and 347 chosen in Part I
2. MATH 348, and MATH 323 or 332
3. Two additional advanced mathematics courses
4. At least 8 hours of supporting courses in another subject

### Operations Research Option

This option is for students interested in management science, industrial planning, and related areas. This option also provides excellent preparation for graduate study in business administration, economics, or industrial engineering.

1. MATH/CS 257
2. MATH 363/STAT 310 taken in Part I, and MATH 364/STAT 311 or MATH 369/STAT 320
3. MATH 383 and 384
4. MATH 312 or 313
5. At least 8 hours in economics, business administration, and industrial engineering

### Theory of Computation Option

This option is for students interested in the theoretical aspects of computer science. This option prepares the student for graduate study in mathematics or computer science or for work in computer industries.

1. Nine hours of computer science beyond CS 121, including CS 273
2. MATH 319, and MATH/CS 373 and 375
3. One additional course chosen from MATH 312, 313, 314, 377, 383, 384

**Departmental Distinction.** Distinction will be awarded on the basis of selection of 300-level courses in mathematics and grade-point average.

---

<sup>1</sup> A revision of this program not reflected in this statement was pending approval at the time of publication. Students entering August 1991 or later should consult the Department of Mathematics regarding requirements.

## Mathematics and Computer Science

This major is sponsored jointly by the Departments of Mathematics and Computer Science. See page 258.

## Music

Music courses: 37 to 41 hours (excluding keyboard skills requirement)  
Supporting course work: 11 to 12 hours chosen in consultation with an adviser

The major in music is designed for students whose academic interests are broader or more compelling than can be accommodated within the several music programs in the College of Fine and Applied Arts (page 227). This program, which incorporates a high degree of flexibility beyond the core of required courses, can prepare the way for graduate study in music theory, composition, or the various branches of musicology. (Those students interested in performance or music education may refer to the fine and applied arts curricula starting on page 209 of this catalog.)

### REQUIREMENTS

All students in the music major must complete or pass proficiency tests in the following core of courses for a total of 29 to 31 credit hours:

- MUSIC 101-104, 107-109, and one 300-level music theory course
- MUSIC 110, 213-214, and one 300-level musicology course

All students in the major must possess or acquire some mastery of keyboard skills, by successfully completing MUSIC 160 and 161, or by demonstrating such skills through an appropriate audition. (Students who wish to pursue studies in applied music are required to satisfy the instrumental or vocal qualifying audition designed for students outside the School

of Music; credits earned in applied music beyond the keyboard requirement stated above are generally considered elective.) Students in this program may not use hours from MUSIC 100 toward the minimum 120 hours for graduation. Normally, students begin the study of music theory with MUSIC 101.

The remainder of the program, consisting of at least 8 or 9 additional hours of upper-level music courses and 11 or 12 hours of supporting course work in other fields, is planned by the student with the help of a departmental adviser of his or her choice, subject to the approval of the departmental advising chairperson. Three general options are available in the music major: music history, ethnomusicology, and music theory/composition. The choice of courses within these options may vary considerably according to the interests of the student. The following models illustrate the types of programs recommended but specify neither absolute requirements nor limitations.

## OPTIONS

### Ethnomusicology Option

1. With emphasis on American Indian cultures.
  - a. MUSIC 308, 317 (6 hours), and one additional course from the series 310-315
  - b. Supporting course work chosen from ANTH 103, 230, 331 (or 333, 361); RELST 363; HIST 151, 152
2. With emphasis on India and Middle Eastern culture.
  - a. MUSIC 308, 317 (6 hours), and one additional course from the series 310-315
  - b. Supporting course work chosen from ANTH 103, 230, 368
3. With emphasis on African and Afro-American cultures.
  - a. MUSIC 308, 317 (6 hours), and one additional course from the series 310-315
  - b. Supporting course work chosen from ANTH 103, 230, 261; one sequence in Afro-American history, such as ANTH 367 and HIST 215, or HIST 253 and 254

### Music History Option

1. With emphasis on medieval/Renaissance music.
  - a. MUSIC 307, 308, and either 310 or 311
  - b. Supporting course work chosen from HIST 111, 112, 203, 204, 304, 305 (or 332, 333); a course in medieval or Renaissance literature (e.g., ENGL 202, 204; C LIT 204); ARTHI 111; LAT 101, 102
2. With emphasis on music since the Renaissance.
  - a. MUSIC 308, 313, 314, 315
  - b. Supporting course work chosen from HIST 111, 112, 309, 310 (or 312, 313); ENGL 206; ARTHI 112

### Music Theory/Composition Option

1. With emphasis on music theory.
  - a. Music courses chosen from MUSIC 300 through 308
  - b. Supporting course work chosen to include MATH 118; one course in English composition (e.g., RHET 133 or equivalent); and one course in philosophy with emphasis on aesthetics (e.g., PHIL 101, 102, 105, 323)
2. With emphasis on composition.
  - a. MUSIC 106, 204-206, 306.
  - b. Supporting course work chosen to include MATH 118; one course in English composition (e.g., RHET 133 or equivalent); and one course in philosophy with emphasis on aesthetics (e.g., PHIL 101, 102, 105, 323)

**Departmental Distinction.** Students interested in attaining departmental distinction should consult with the honors adviser no later than the second semester of their junior year. In order to be eligible for departmental distinction, a student must have a cumulative grade-point average of 4.4 or above (at the end of the sixth semester) and must complete four hours of MUSIC 229— Thesis and Advanced Undergraduate Honors in Music. Distinction will be recommended at the discretion of the faculty after an evaluation of the student's overall record and the completed thesis.

## Philosophy

Requirements: At least 44 hours

Philosophy courses: At least 26 hours

Supporting course work: At least 12 hours, plus 6 to 8 hours of Western civilization



Philosophy is the oldest, broadest, and most fundamental form of inquiry. Some philosophical questions have to do with the understanding of ourselves and whatever else there may be. Others focus upon the nature of different forms of knowledge and experience, and upon ethical issues and problems of value. The study of philosophy is one of the most important elements in a good liberal education. It also improves one's ability to think clearly, and to construct, analyze, and criticize arguments of any kind.

## REQUIREMENTS

The major in philosophy involves taking a minimum of 44 hours of philosophy and supporting course work, and consists of four parts: (1) the core philosophy courses (14 hours); (2) a program of supporting course work, involving at least 12 hours of course work in some other department(s); (3) a Western civilization sequence (6 to 8 hours); and (4) at least 12 hours of further course work in philosophy beyond the 100 level, including at least three additional 300-level courses.

1. **Philosophy Courses.** If possible, students should take these courses prior to the senior year. Substitutions may be made only with the approval of the chair of the department.
  - a. PHIL 102—Logic and Reasoning; or PHIL 202—Symbolic Logic (those considering graduate work in philosophy should take PHIL 202) (3 hours)
  - b. PHIL 203—Ancient Philosophy (4 hours)
  - c. PHIL 206—Early Modern Philosophy (4 hours)
  - d. PHIL 321—Ethics and Value Theory (3 hours)
2. **Supporting Course Work.** A student may select either of two types of programs of supporting course work and should work out a specific program of the type chosen with the help and approval of a departmental adviser.
 

*Option I: Intensive study in another discipline.*  
This comprises a minimum of 12 hours of course work, normally beyond the 100 level, in one other discipline.

*Option II: A special program of study built around a unifying theme or topic.*  
This involves a minimum of 12 hours of course work outside philosophy in one or more other discipline(s), normally beyond the 100 level, together with one or more philosophy course(s) related to the theme or topic. The program may focus upon a historical period, a certain subject (e.g., language, politics, science, religion, art), or a particular philosophical problem, with outside course work in appropriate disciplines.
3. **Western Civilization General Education Sequence.** To ensure that they have a general knowledge of Western civilization, including philosophy majors must take an approved two-semester sequence in Western civilization—currently either HIST 111 and 112, or CLIT 141 and 142.
4. **Further Course Work.** The remainder of a student's major is planned by the student with the help and approval of an adviser. It may include additional supporting course work in other disciplines, but must enable the student to satisfy the requirement of a total of at least 12 hours of course work in philosophy beyond the 100 level (including at least three 300-level courses) in addition to the core courses.

**Departmental Distinction.** Students may become eligible for graduation with distinction in philosophy in two ways: by pursuing either the *thesis* option or the *course work* option. (1) The *thesis* option involves taking a total of at least 29 hours of course work in philosophy and writing a thesis. (2) The *course work* option involves taking at least 35 hours of course work in philosophy and accumulating a grade-point average in all philosophy courses taken of at least 4.5. Further information is available in the department office.

## Physics

Physics courses: 20 hours (200- or 300-level courses)

Supporting course work/prerequisites: 10 or 11 hours of calculus, 12 hours of general physics, and 20 hours chosen in consultation with an adviser

This major allows students maximum flexibility to develop scientifically oriented careers in fields requiring a physics background. See also the sections on the curriculum in engineering physics, LAS physics, and LAS teaching of physics.

## REQUIREMENTS

1. General physics and calculus satisfied by the sequence PHYCS 106, 107, and 108, or equivalent, together with the sequence MATH 120, 132, and 242, or equivalent.

2. Twenty hours of 200- or 300-level physics courses including PHYCS 210, 331, 332, and 333, and excluding PHYCS 319.
3. Twenty additional hours of course work oriented toward physical science selected with departmental approval from the following areas, with at least two courses in each area chosen: astronomy, atmospheric sciences, chemistry, computer science, various branches of engineering, environmental sciences (see departmental office for listing), geology, life sciences, mathematics, philosophy, social sciences, and education oriented toward the teaching of science.

**Departmental Distinction.** Same as those listed under the curriculum in physics. See page 302.

## Political Science

Political science courses: 27 hours, including POL S 150

Supporting course work: 20 hours chosen in consultation with an adviser

The Department of Political Science encourages students to acquire a broad understanding of political science and to pursue in depth selected subfields of the discipline. To accomplish these objectives, the department provides courses of study that introduce students to the discipline and to its principal fields. Among these are American government and politics; public administration and public policy; comparative government and politics; international relations; political philosophy; and formal theory and empirical methodology. Supporting courses are an integral part of the program and should be selected with a view toward building a coherent selection adapted to the student's particular needs.

### REQUIREMENTS

The major in political science requires 47 hours. Of these, 27 hours must be within the Department of Political Science. They must include the following:

1. POL S 150
2. Any three of the following: POL S 100, 240, 250, 260, 270, 280
3. At least four courses at the 300 level. (Most 300-level courses will require as prerequisites the appropriate 200-level courses [or, in the case of American politics courses, POL S 150] or the consent of the instructor.) Up to 6 hours of credit in POL S 299 may be substituted for 300-level credit. POL S 296 counts for this purpose as a 300-level course.

Not more than 6 hours of individual study courses in political science or 6 hours for internships may be included in the major; a student with both independent study hours and internship hours may include a maximum of 9 hours of such credit in the major. POL S 293 is reserved for those seniors doing honors theses for distinction in political science and may not be counted in the 47-hour minimum required for the major.

Outside the department, at least 20 hours of credit in supporting course work is required in a field or fields to be selected in consultation with the student's adviser. Supporting courses should complement subfield majors in political science chosen by the student. At least 12 of these 20 hours must be in courses numbered 200 or above.

**Departmental Distinction.** A student in political science earns distinction with a 4.25 grade-point average in political science courses that must include 4 hours of POL S 293 (senior honors thesis). See departmental academic adviser for details.

## Portuguese

This major is sponsored by the Department of Spanish, Italian, and Portuguese. See page 290.

## Psychology

Psychology courses: 32 hours including an introductory course

Supporting courses: 12 hours chosen in consultation with an adviser

Psychology is the scientific study of human and animal behavior. Psychologists study behavior in systems ranging from single cells to the individual person, from small groups to communities. Psychologists strive to describe behavior and to understand its underlying biological and social mechanisms. This enterprise, designed to better understand human behavior, accumulates knowledge that can help solve problems faced by individuals and by communities.

Some areas of interest in psychology:

*Biological psychology* is the study of the biological mechanisms underlying behavior. Biological psychologists generally are interested in the brain and the nervous system, in the endocrine system, and in other organismic processes.



*Clinical psychology* is the study of problems encountered by individuals, groups, and families—especially problems involving psychopathology. Clinical psychologists are interested in the application of psychological knowledge and techniques for the alleviation of these problems. *Community psychology* is the study of social processes and problems of groups, organizations, and neighborhoods, and the development and evaluation of progress for social change and social policy based on psychological understanding.

*Developmental psychology* is the study of intellectual development, emerging personality, and the acquisition of language, as well as psychophysiological and social development processes as individuals develop from birth through old age.

*Engineering psychology* uses scientific study to develop an understanding of human behavior, and to improve the efficiency of interactions between humans and machines.

*Experimental psychology* is the study of basic behavioral and cognitive processes, including learning, memory, perception, attention, problem solving, motivation, and psycholinguistics.

*Measurement and mathematical psychology* specialists develop mathematical models of psychological processes and devise methods for quantitative representation and analysis of data about behavior. These are used in the study of differences between individuals in ability, personality, preferences, and other psychological phenomena.

*Personality psychology* focuses on individual behavior. It is the study of ways to understand and describe an individual's behavior and to predict an individual's future behavior.

*Personnel psychology* is the application of techniques of assessment, prediction, and intervention to areas of human resources in organizations, including, but not limited to, standard personnel selection and training, attitude assessments and interventions, and program evaluations.

*Social psychology* is the study of attitudes, social perception and cognition, interpersonal relations, interpersonal interactions, and social and cultural factors affecting human behavior.

## REQUIREMENTS

**Psychology Requirements.** A minimum of 32 hours in psychology including 12 hours of advanced courses. Advanced courses in psychology include PSYCH 291, 293, 294, 297, 298, and all 300-level courses.

1. Introductory course in psychology (PSYCH 100, 103, or 105)
2. Statistics for psychologists (PSYCH 235 or equivalent)
3. Two courses from the following: PSYCH 210—The Brain and Mind; PSYCH 217—Comparative Development; PSYCH 224—Cognitive Psychology; PSYCH 230—Perception and Sensory Processes; PSYCH 248—Psychology of Learning and Memory; PSYCH 258—Human Factors in Human-Machine Systems
4. Two courses from the following: PSYCH 201—Introduction to Social Psychology; PSYCH 216—Child Psychology; PSYCH 238—Abnormal Psychology; PSYCH 245—Industrial Organizational Psychology; PSYCH 250—Psychology of Personality
5. A course in psychology research methods, which may be satisfied by any course listed below with an asterisk (\*) or by PSYCH 211 or 231
6. One course from each of the following 300-level groups:
  - a. Biological and experimental psychology: PSYCH 311\*, 313, 314, 315, 320, 324, 325, 326, 329, 342, 343, 345\*, 347\*, 348, 356, 360
  - b. Industrial, measurement, and social psychology: PSYCH 332\*, 333\*, 335, 352, 353, 354, 355, 357, 359, 371, 372, 373, 375, 390\*
  - c. Developmental personality and social ecology, and clinical psychology: PSYCH 318, 323, 336, 337, 350\*, 362, 363\*, 365, 368

**NOTE:** A course may be used to fulfill both the research methods requirement and a specific group requirement.

**Supporting Course Work Requirements.** A minimum of 12 hours is required in course work outside psychology that will complement the core program. These courses must be approved by an academic adviser.

## UNDERGRADUATE AREAS OF EMPHASIS

A number of emphases within the major in psychology are designed for students who are seeking general liberal arts degrees, applied degrees, or degrees that will provide a solid academic background in preparation for graduate education in psychology and related fields. Lists of the required and suggested courses are available from the psychology undergraduate advising office.

**General psychology** is designed for students interested in a broad liberal arts education with psychology as a focal area and for students who plan to attend graduate or professional school in fields other than psychology. Examples of these specializations include premedicine, prelaw, and preparation for graduate work in fields such as social work, business administration, and labor relations.

**Graduate preparatory** in psychology is designed mainly to provide students with a solid academic background that will prepare them for graduate education in a number of psychology specializations. Career opportunities in these specializations vary, as does the required level of graduate school training. While a doctorate is needed for most areas of academic psychology, a master's degree is sufficient for careers in many applied psychology fields such as personnel psychology, measurement psychology, and engineering psychology.

**The mental health workers program** is designed to develop knowledgeable and experimental mental health practitioners capable of providing direct services to clients as well as supervising lower-level staff members in the implementation of treatment programs. Training includes a core of general and mental health-related psychology courses and a series of field placements.

**A combined engineering-liberal arts and sciences five-year program** leading to bachelor's degrees from both colleges (see page 177) is available with a psychology major. Psychology and supporting courses, including allied courses in personnel psychology, are combined with the student's engineering curriculum to provide a specialization in engineering psychology. Tailored to complement the engineering curriculum, this program can be of potential benefit to the student's engineering career or used as the foundation for graduate training in engineering psychology. An engineering psychology program might include PSYCH 103, 158, 230, 231, 235, 245, 248, 258, 301, 329, 356, 357, and 390.

**Departmental Distinction.** Graduation with departmental distinction requires successful completion of the department's undergraduate honors program. This program is a three-semester pattern of courses designed to offer the promising undergraduate an opportunity to do sustained scholarly work in a specific research project, culminating in the preparation of a bachelor's thesis. Consult the undergraduate advisory office for details.

## ACADEMIC ADVISING

The psychology undergraduate advising office is open to help students choose patterns of courses relevant to the various major options and specializations, as well as to help students explore graduate school, professional school, and career options. Advising is done by the faculty and a staff of academic counselors.

A psychology student information center (PSI center), staffed by student volunteers, provides student-to-student information about various department and community educational opportunities, career and graduate school planning, and related topics.

## Religious Studies

Religious studies courses: 24 hours (minimum)

Supporting courses: 6 to 8 hours of Western civilization, together with sufficient courses to total at least 48 hours for the major

The religion and culture area of interest is designed for students seeking a broad liberal arts education with a focus in religious studies. Persons thinking of the ministry or rabbinate are encouraged to consider this area seriously. It should be recognized that the large number of hours involved is due to more than the usual guidance in the choice of electives.

The other five areas are designed especially for students thinking about graduate work in one of the traditional areas of religious studies.

## REQUIREMENTS

### Core courses (eight courses)

1. RELST 110—World Religions
2. RELST 201 and 202—Biblical studies
3. RELST 104 or 122—Asian religion
4. RELST 102 or 230—Critical perspectives
5. RELST 120 (or 121 or 130)—Judaism or Christianity (chosen in consultation with the undergraduate adviser)
6. Western civilization requirement—HIST 111 and 112, or C LIT 141 and 142



**Area of interest (eight to ten courses).**

The following programs are examples of acceptable patterns for a major in religious studies. Any coherent program worked out in consultation with an adviser is permitted. A careful use of independent studies courses (RELST 290) is also encouraged for the development of suitable majors.

**Asian Religions** (ten courses)

1. Language—four courses (e.g., Chinese, Japanese, or Sanskrit)
2. Religious studies—three courses (numbered 200 or above) in Asian religions
3. Supporting courses—three courses (two beyond the 100 level) in either the East Asian or South Asian area

**Biblical Studies** (nine courses)

1. Language—four courses (Hebrew or Greek).
2. Religious studies—two courses (numbered 200 or above) in the area of biblical studies
3. Supporting courses—three related courses (all beyond the 100 level)

**Judaica** (ten courses)

1. Language—four courses (Hebrew, classical or modern)
2. Religious studies—three courses (numbered 200 or above) in Judaica
3. Supporting courses—three related courses (all beyond the 100 level)

**Philosophy of Religion** (eight courses)

1. Religious studies—four courses (numbered 200 or above), including RELST 362
2. Supporting courses—four courses (three beyond the 100 level) in philosophy

**Religion and Culture** (ten courses)

1. Two semesters of an appropriate language (e.g., Greek, Hebrew, Chinese, or German) chosen in consultation with the undergraduate adviser
2. Religious studies—three courses numbered 200 or above
3. Supporting courses—five related courses (three beyond the 100 level) in the social sciences (anthropology, psychology, sociology), arts and humanities, with at least one course in each category

**Western Religion** (eight courses)

1. Two semesters of an appropriate language (e.g., Greek, Hebrew, Latin, or German) chosen in consultation with the undergraduate adviser
2. Religious studies—three courses numbered 200 or above, including one course in Islam
3. Supporting courses—three related courses (all beyond the 100 level) in the history, literature, and art of the Western cultural traditions

**Advanced Hours Requirement.** Students must elect, as a part of the major, a minimum of 12 hours in 300-level courses or in 200-level courses approved specifically for advanced hours credit.

**Departmental Distinction.** Distinction in the program is granted on the basis of excellence in religious studies demonstrated in course work and a senior thesis written in the context of RELST 293. The final determination of Distinction is by vote of the faculty of the religious studies program.

**Rhetoric**

This major is sponsored by the Department of English. See page 260.

**Russian<sup>1</sup>**

Russian courses: 30 hours (beyond the 100 level)

Supporting courses: 20 hours chosen in consultation with an adviser, including 6 to 8 hours of Western civilization

Russian is spoken by some 250 million people and is used by many more in the Soviet Union and the countries of Eastern Europe. Russian is now second only to English as the language of science, and it is also the language of one of the world's great literatures. Persons trained in Russian normally find employment in teaching, governmental service, journalism, and research in many areas. Many students majoring in other fields find it useful to learn Russian as a valuable research tool.

The major in Russian consists of at least 50 hours distributed as follows:

1. Russian language—at least 15 semester hours from the following courses: RUSS 200, 211, 212, 213, 214, 303, 304, 313, 314. Six hours must be at the 300 level. At least one conversation course and one composition course are required.

2. Russian literature and linguistics—at least 15 semester hours, consisting of RUSS 215 and 216; either RUSS 315 or 317; and at least six hours from the following list: RUSS 222, 225 or 317, 307 or 308, 324, 335, 337 or 338, 360, 370, 375.
3. Supporting course work—at least 20 semester hours, consisting of two semesters of Western civilization (either HIST 111 and 112 or C LIT 141 and 142); plus one of the following five options, with the approval of the Russian adviser:
  - a. Area studies: 14 to 15 hours consisting of HIST 219; either RUSS 113 or 114; and at least three other courses on Russia, the Soviet Union, or East Europe (offered by such units as anthropology, art history, architecture, Asian studies, cinema studies, communications, economics, education, geography, history, music, philosophy, political science, religious studies, sociology, theatre). See the Russian and East European Center for a list of current course offerings.
  - b. A single language other than Russian, or general methodology courses in the linguistics department (excluding Russian cross-listed courses): 12 to 14 hours of 200- and 300-level courses.
  - c. A national literature other than Russian, or general methodology courses in the comparative literature program (excluding Russian cross-listed courses): 12 to 14 hours.
  - d. A minor specified by another department or unit.
  - e. The non-Russian half of a double major.
  - f. Any 12 to 14 hours constituting a plan of study that is intellectually or professionally coherent.

**Departmental Distinction:** Graduation with distinction may be earned by completion of any one of the following three options:

1. GPA in departmental courses of 4.75; or
2. GPA in departmental courses of 4.50, plus successful completion of RUSS 293; or
3. GPA in departmental courses of 4.50, plus successful completion of academic study trip to the USSR, documented by graded transcript.

See departmental adviser to work out details, preferably two semesters before graduation.

---

<sup>1</sup>A change in the name of the Russian major to Russian language and literature was pending final approval at the time of publication.

---

## Russian and East European Studies<sup>1</sup>

Requirements: at least 56 hours

A major in Russian and East European Studies is offered through the Center for Russian and East European Studies. The aim of this major is to provide the student with (a) a base in one discipline that will permit the student, without much additional work, to qualify for graduate study; (b) an interdisciplinary focus on the Soviet Union and Eastern Europe; and (c) a start toward the language training needed for specialization in this area.

### REQUIREMENTS

1. At least 16 hours of language courses in Russian or another language of Eastern Europe or the Soviet Union, or fourth-semester proficiency. (Students contemplating graduate work in this major are advised to continue language study well beyond the minimum requirement.
2. At least 20 hours in courses that focus on the Soviet Union or Eastern Europe, including at least one course from each of three departments other than the department used for component (3). Although some of the courses used to count under (2) may be from the same discipline as those under (3), any one course can be counted in only one category. Courses currently being offered that focus entirely on the USSR or Eastern Europe include: ANTH 382; ECON 357; GEOG 353; HIST 219, 320, 321, 326, 327, 328, 329, 330; POL 345, 346; POL S 335, 346, 383; RUSS 113, 114, 115, 116, 119, 199, 215, 216, 222, 225, 315, 317, 324, 335, 337, 338, 360, 370; SLAV 319; SOC 350; UKR 118, 398. Others may be counted with permission of the center director. (Language courses that concentrate on the basic skills of speaking, listening, reading, and writing *cannot* be counted as part of this component, although Russian language courses *may* be used as part of component (3) as described below.)
3. At least 20 hours in a single discipline. Some disciplines traditionally used are anthropology, economics, geography, history, political science, Russian language and literature, and sociology. Among disciplines also used are business administration, education, English,



fine arts, French, German, journalism, linguistics, mathematics, philosophy, psychology, and various natural sciences. Students are encouraged to see their advisers regarding use of other disciplines. If a foreign language is used for this component, 20 hours must be taken beyond the introductory courses (i.e., normally the first two years, or the 101-104 sequence).

**Additional Courses.** In addition to courses that deal wholly with Eastern Europe or the USSR and are mentioned above, there are many others devoted to the Soviet Union and Eastern Europe to some extent that may be counted as partial credit toward the fulfilment of this major. Students may consult the center director for further information on such courses.

In selecting courses for the major, students should bear in mind the LAS advanced hours regulation that requires students to have 21 semester hours of 300-level and approved 200-level courses for graduation, of which at least 12 hours must be in courses directly applicable to the major. Courses at the 300-level that are selected for both components (2) *and* (3) above may be used to meet this requirement.

**Departmental Distinction.** Students who hope to qualify for distinction in the major sponsored by this center should consult with the center director at the beginning of the junior year or earlier to prepare a suitable plan. This plan will usually include the writing of a substantial research paper in consultation with a faculty member of the center.

---

<sup>1</sup>Revision of the Russian and East European studies major reflected in this statement was pending final approval at the time of publication. Also, at the time of publication, further revision of the major had been proposed. Students should consult their advisers regarding program requirements.

---

## Sociology

Sociology courses: 30 hours, including SOC 100, 185, 200, 381

Supporting course work: 12 hours

Sociology is concerned with the explanation of human social behavior. Its scope is broad, ranging from social relations among individuals to social forces that change entire societies. In studying phenomena ranging from family structures, to social revolutions, sociologists develop theories and conduct research to obtain a greater understanding of the social processes that shape our lives.

### REQUIREMENTS

The major requires at least 42 hours; 30 in the Department of Sociology and 12 (supporting course work) outside the department. The sociology hours include a core of four required courses:

- SOC 100—Introduction to Sociology
- SOC 200—Introduction to Sociological Theory
- SOC 185—Introduction to Social Statistics
- SOC 381—Survey Research

Students may select any sociology courses to fulfill the remaining 18 hours. Students may choose to focus in one particular area of sociology, although this is not required. Each substantive area must include at least two courses from a specified list that is available from the Department of Sociology office. The substantive areas are

- Criminology
- Health and medicine (medical sociology)
- Industry, work, and occupations
- International studies
- Population studies (demography)
- Prelaw
- Social problems
- Social psychology
- Science and technology
- Research methods/social statistics

Examples of requirements for two substantive areas follow.

*Health and Medicine (Medical Sociology).* Recommended for students interested in medical and health-related professions. Students must take at least two of the following: SOC 264, 333, 337, 339.

*Criminology.* Recommended for students interested in professions related to the criminal justice system. Students must take at least two of the following: SOC 231, 317, 324, 331, 357, 358.

**Supporting Course Work.** Supporting course work is designed to expand the student's education in the social sciences or to help prepare for professional school or a career. All supporting course work is taken outside the Department of Sociology. A student may take supporting course work in one department, such as psychology, economics, history, or statistics, or from a variety of disciplines. Courses may be related to a specific profession, such as law, social work, business, or medicine. With an adviser's approval, departmental or interdisciplinary minors may be used in lieu of supporting course work.

**Advising.** Each student should see a departmental adviser at least once a year to choose sociology courses and supporting course work, and to monitor progress.

**Departmental Distinction.** To graduate with distinction, a student must have a University grade-point average of at least 4.3, a sociology grade-point average of at least 4.5, and complete the senior honors seminar (SOC 295). See an undergraduate adviser for details.

## Spanish, Italian, and Portuguese

Spanish, Italian, or Portuguese courses: At least 26 to 28 hours, depending on major

Supporting course work: 15 to 18 hours (chosen in consultation with an adviser), or a minor (approximately 18 hours), both in courses beyond 104

### SPANISH

The major in Spanish consists of a minimum of 28 hours in Spanish beyond 104 and supporting course work (15 hours) or a minor (generally 18-21 hours) in a related area.

1. At least 28 hours in Spanish courses above the 100 level, to include 20 hours of core courses and 8 hours of electives. SPAN 200 or equivalent advanced placement credit is a prerequisite for most 200-level courses. The core courses must include: two language courses (SPAN 210 and 214); one culture course (SPAN 240 or the indicated substitutions for the Culture of Spanish America); one Introduction to Hispanic Linguistics (SPAN 260); two Introduction to Literature courses (SPAN 225 and 227); one Spanish Peninsular literature course (SPAN 250 or 252); one Spanish American literature course (SPAN 254 or 256). Students who wish Honors in Spanish must enroll in SPAN 291.

The 8 additional hours, chosen by the student in consultation with the adviser, may include course work from the following groups: language (including linguistics), culture, literature, Spanish for industry and commerce, translation/interpretation. Literature courses in English will not count towards the major, except for SPAN 242 or 244, taken as a substitute for a departmental Spanish American culture course.

2. At least 15 hours of supporting course work or a minor (generally 18-24 hours) in a related area of study, which will be chosen by the student and approved by the adviser. Such areas may include, for example, any other language and literature (including Portuguese, Catalan, and Italian courses), Latin American studies (exclusive of Spanish American literature courses), history, political science, biology (pre-med), international law (prelaw), economics and finance, business administration, education, architecture, fine arts, and journalism.

**Year Abroad Program:** See page 246.

### ITALIAN

The major in Italian consists of a minimum of 27 hours in Italian beyond 104 and supporting course work (15 hours) or a minor (generally 18-21 hours) in a related area. Specifically, the following are required:

1. At least 27 hours in Italian courses above the 100 level, distributed as follows: one introductory course in the study of Italian literature (ITAL 200); four courses in Italian literature (ITAL 313, 314, 320, 330, 340, 342); two courses in Italian language (ITAL 210 and one of the following: 220, 222, 280, 302); one in linguistics (ITAL 350, 362), and one in Italian culture (ITAL 240, 306, 308).
2. At least 15 hours of supporting course work or a minor (approximately 18 hours) chosen in consultation with an adviser, in one related area (or a combination, with no fewer than 8 hours in each). Areas may include, for example, any other language and literature, history, political science, biology (premed), international law (prelaw), economics, finance, business administration, education, architecture, fine arts, journalism.

### PORTUGUESE

The major in Portuguese consists of a minimum of 26 hours in Portuguese beyond 104 and supporting course work (15 hours) or a minor (generally 18-21 hours) in a related area. Specifically, the following are required:



1. At least 26 hours in Portuguese courses above the 100 level. The core courses for the major include Port. 210, 212, 303, 304, 306, 310, 320 and 362. PORT 199 and 220 may be included with the approval of the undergraduate adviser.
2. At least 15 hours of supporting course work or a minor (approximately 18 hours) in a related area of study chosen by the student and approved by the adviser. There is a wide choice of supporting courses, because the student's interests may vary from Iberian literature to animal husbandry in Angola and urbanology in Brazil. Supporting areas may include: humanities (comparative literature, comparative religion, linguistics, philosophy), social sciences (anthropology, geography, history, Latin American studies, political science, sociology), education, fine and applied arts, journalism. Other fields, or groups of fields, may be approved by the undergraduate adviser.

**Departmental Distinction.** To be considered for departmental distinction, a student must maintain a 4.5 grade-point average and fulfill special additional requirements. See the department's honors adviser.

## Speech and Hearing Science

Speech and hearing courses: 30 hours, as specified below

Supporting course work: 24 hours, chosen in consultation with an adviser

This field provides a broad background in the biological, behavioral, linguistic, and social foundations of human communication. A student who has a particular interest in the general area of speech, language, or hearing may use this major primarily as a liberal arts background with the intent of pursuing graduate education in speech and hearing or in a related field.

### REQUIREMENTS

1. Thirty hours of speech and hearing science, to include SPSHS 102, 301, 375, 376, 378, 383, 385, and 390
2. Twenty-four hours of courses selected with departmental approval in any of the following departments: computer science, electrical engineering, linguistics, mathematics, physics, physiology, psychology, and speech communication

**NOTE:** A student may use up to six hours of SPSHS 290 as free electives toward the bachelor's degree.

**Departmental Distinction.** To graduate with distinction, a student must have minimum grade-point averages of 4.25 overall (A = 5.0) and 4.5 in speech and hearing courses, and must register in the honors course (SPSHS 291) for 4 hours of credit. Additional information for graduation with distinction is available in the department office.

## Speech Communication

Speech communication courses: 29 to 36 hours

Supporting course work: 12 to 19 hours approved by an adviser, for a total of 48 hours in the major

Speech communication embraces various studies of the use of language and speech for social purposes. The field serves many students as preprofessional education and others as the core of a liberal education. The curriculum reflects concern for the theory, practice, and criticism of communication in varied settings: interpersonal interaction, public discourse, group and organizational communication, and some literary and artistic forms. The Department of Speech Communication offers two options within its major: rhetorical and communication theory, and interpretation. The major consists of a minimum of 48 hours distributed as follows:

1. A minimum of 29 hours in courses in speech communication, at least 15 of which must be at the 200 level or above.
2. A minimum of 12 hours in supporting courses chosen from departments or programs whose offerings are appropriate to the option selected. A student must obtain the approval of a speech communication adviser for the selected program of courses.
3. A minimum of 7 additional hours in speech communication or supporting courses selected in consultation with an adviser.

### OPTIONS

#### Interpretation Option

1. The student must take SPCOM 141, 142, 161, 255, 342, 344, and 345.
2. The student must elect at least 18 hours in literature courses approved by a speech communication adviser. These should include a course in Shakespeare, a course in American literature, a course in English literature before 1800, and a course in English literature from 1800 to the present.

3. Additional hours in speech communication and in supporting fields will be chosen in consultation with, and with the approval of, a speech communication adviser.

**Departmental Distinction.** Superior students are encouraged to consult the departmental honors adviser about requirements and opportunities for participation in the departmental honors program.

### **Rhetorical and Communication Theory Option**

This option provides a broad acquaintance with theory, practice, and criticism in rhetorical and communication theory.

The student must take at least one speech communication course from each of the following areas:

1. Interpersonal and small group communication: SPCOM 113, 211, 230, 313, 332, 335
2. Persuasion and social influence: SPCOM 213, 221, 223, 320, 321, 324
3. Rhetorical theory: SPCOM 102, 210, 315, 317, 322
4. Criticism of public discourse: SPCOM 177, 252, 253, 254, 323, 350, 353

Additional hours in speech communication and in supporting fields will be chosen in consultation with, and with the approval of, a departmental adviser. The resulting program may be distributed among the four areas listed above, or it may be a specialized program organized around a theme or topic.

### **Statistics**

Statistics and mathematics courses: 10 to 17 hours of calculus and elementary course work, and 18 to 24 hours of 300-level courses

Supporting course work: 12 hours of approved courses in an area of statistical application

Statistics is the science of modeling, summarizing, and analyzing data, and of using mathematics and computing tools to make predictions and decisions in the face of uncertainty. Statistical ideas are applicable in any area involving quantitative measurement and in almost every area of scholarly pursuit. The major is designed to provide students with an understanding of the concepts of statistical inference and a familiarity with the methods of applied statistical analysis. It can be used as preparation for a career in business, industry, or government, or as a preparation for further graduate study in statistics or in a related area.

#### **REQUIREMENTS<sup>1</sup>**

1. Calculus through MATH 242 or 245 or equivalent.
2. MATH 315 or 318.
3. MATH 247 or 280 (advanced calculus).
4. STAT 310 and 311 (statistical inference I-II).
5. STAT 324 or 325 (linear models).
6. Three courses chosen from the following lists, at least two of which must be from list a:
  - a. Other statistics courses: STAT 326, 327, 328, 329, 330; or MATH 366; or the course in requirement 5 above not used for that requirement.
  - b. Preparation for post graduate study: MATH 346 or 348, and MATH 344 or 347.
7. A working knowledge of a programming language (satisfied, for instance, by CS 101, 105, or 121).
8. Supporting course work: At least 12 hours in a secondary subject in which statistical methods are applicable. No more than 6 of these hours may be in courses emphasizing statistical methods. Course selection must have adviser approval.

**Departmental Distinction:** Distinction will be awarded on the basis of the selection of 300-level courses in statistics and the grade-point average in required courses.

---

<sup>1</sup>It is strongly recommended that STAT 100 be taken during the freshman or sophomore year as an early introduction to statistical ideas. Highly prepared students who are able to take STAT 310 before the junior year should not take STAT 100.

### **Statistics and Computer Science**

This major is sponsored jointly by the Departments of Statistics and Computer Science. It is designed to prepare students for professional or graduate work in statistics and computer science. Specific requirements are as follows:



<b>Mathematics Requirements:</b> .....	13-14 hours
MATH 120, 132, and 242, or MATH 135 and 245 (calculus) .....	10-11
MATH 247, 341, 344, or 347 (analysis) .....	3
<b>Computer Science Requirements:</b> .....	19 hours
CS 121 and 225—Software core courses .....	7
CS 257—Numerical Methods .....	3
CS 273—Introduction to Theory of Computation .....	3
CS 231—Computer Architecture I .....	3
CS 284—Logic Design .....	3
<b>Statistics Requirements:</b> .....	10 hours
STAT 310—Introduction to Mathematical Statistics and Probability I .....	4
STAT 311—Introduction to Mathematical Statistics and Probability II .....	3
STAT 328—Statistical Computing .....	3

**Other Specified Electives:**

At least six statistics, computer science, and mathematics courses, with at least one chosen from each of the following groups:

1. MATH 315, 318—Matrices and linear algebra
2. CS 373, 375—Foundations
3. CS 323, 325—Software
4. CS 311, 318, 346—Application software
5. STAT 320, 324, 325—Applied statistics
6. Either STAT 100 taken during the first 60 hours of course work (to provide the student with an early introduction to statistical concepts), or an additional 300-level statistics course, with STAT 326 recommended (this latter option is designed for students who wish to take STAT 310 before the junior year).

**Departmental Distinction:** To graduate with distinction, a student must have a specified grade-point average in the 300-level statistics, computer science, and mathematics courses listed above. A grade-point average of 4.25 is required for distinction, 4.5 for high distinction, and 4.75 for highest distinction.

**MINORS**

The following minors have final approval and may be used only in conjunction with a major in the sciences and letters curriculum. Other minors are pending final approval and still others are being proposed this academic year. The minors outlined below are approved and may be used now.

**Minor in Anthropology<sup>1</sup>**

The minor in anthropology may be tailored to each student's individual needs, thus accommodating students with majors as diverse as premedicine, prelaw, geography, and art history. The 18 hours in anthropology must include at least two of the following courses: ANTH 220, 230, 240, and 270. At least 6 hours must be at the advanced level: this may not include more than a single offering of ANTH 398. Six additional hours at any level are also required to complete the 18 hours.

<sup>1</sup> Establishment of the minor in anthropology was pending final approval at the time of publication.

**Minor in Chemistry**

Twenty hours in Chemistry with the following restrictions:

1. CHEM 100 may not count in the 20 hours.
2. No more than 10 hours may be counted from Chemistry courses numbered 110 or lower.
3. Biochemistry courses may be included in the 20 hours.
4. At least 6 hours shall be selected from Chemistry courses officially designated as “advanced” in the *LAS Student Handbook*.

**Minor in Cinema Studies<sup>1</sup>**

Cinema studies at the University of Illinois is an interdisciplinary curriculum with courses offered in a variety of departments. The minor is structured to provide students with certain

core courses in the discipline while also allowing the freedom to explore various approaches to the subject presented by different departments.

Students should consult the Unit for Cinema Studies (2111 Foreign Languages Building, 333-3356) for more information on the minor and for schedules of cinema studies courses offered each semester.

**REQUIREMENTS**

1. ENGL 104 (Introduction to Film) or ENGL 273 (Intermediate Film Studies: Directors, Genres, Themes)
2. HUMAN 261 (Survey of World Cinema I: The Beginnings through the Coming of Sound) and HUMAN 262 (Survey of World Cinema II: The Thirties to the Present)
3. Two foreign language cinema studies courses. (These include courses on French, German, Italian, Japanese, Russian/East European, and Swedish cinema. Please note that all cinema studies courses are taught in English.)
4. Two additional cinema studies courses.

At least 6 hours of 300-level courses must be included in the above.

<sup>1</sup>Establishment of the minor in cinema studies was pending final approval at the time of publication.

**Classics**

The Department of the Classics offers four minors:

**Minor in Classical Civilization**

Eighteen hours of classical civilization courses, including not more than 6 hours at the 100 level, and at least 6 hours at the advanced level.

**Minor in Classical Archaeology**

Eighteen hours of classical archaeology courses (CLCIV 131, 132, 217, 218, 231, 232, 343, 344, 391), including at least 6 hours at the advanced level.

**Minor in Latin**

Eighteen hours of Latin courses, excluding LAT 101, 102, 105, including at least 6 hours at the advanced level.

**Minor in Greek**

Eighteen hours of Greek courses, excluding GRK 101, including at least 6 hours at the advanced level.

**Minor in Computer Science**

CS 121 and 225—Software core courses .....	7
CS 273—Introduction to Theory of Computation .....	3
At least one additional course, chosen from: .....	3
CS 231—Computer Architecture I (logic design)	
CS 232—Computer Architecture II (machine level programming)	
CS 257—Numerical Methods	
CS 281—Introduction to Computer Hardware	
CS 348—Introduction to Artificial Intelligence	
At least one 300-level course, chosen from .....	3
CS 323, 325—Software	
CS 331, 333—Architecture	
CS 373, 375—Theory	
CS 355, 358, 359—Numerical analysis	
CS 335, 363, 389—Hardware	
CS 341, 342, 346, 347—Artificial intelligence	
Another 200- or 300-level course, chosen either from the lists above, or from these additional courses: .	3
CS 311, 318, 326, 327, 328—Software	
CS 337, 338, 362, 364—Architecture	
CS 339, 381, 384—Hardware	
TOTAL .....	19

At least two courses (6 hours) of this minor must meet the LAS Advanced Hours requirement.

**Minor in English**

Twenty-one hours of course work, distributed as follows:

1. ENGL 101 (Introduction to Poetry), and no more than one other 100-level course. It is strongly recommended that 101 be taken prior to any advanced courses in the minor.



- 2. One 200-level course in British literature before 1800 (ENGL 202, 204, 206, 209), or ENGL 118 (Introduction to Shakespeare).<sup>1</sup>
- 3. One 200-level course in British or American literature after 1800 (ENGL 210, 240, 241, 242, 243, 244, 247, 249, 256, 259 or 260).<sup>1</sup>
- 4. At least 6 hours (two courses) of 300-level work.

Six hours of advanced rhetoric courses (numbered 140 or above) may be included in the above minor.

<sup>1</sup>With the written permission of the English honors adviser, English honors seminars may be substituted for these listed courses, when such seminars are available, open to nonmajors, and appropriate.

**Minor in French<sup>1</sup>**  
**REQUIREMENTS**

Twenty-one hours of course work distributed as follows:

1. French 205-206 (Oral French I, II) .....	6 hours
2. French 209-210 (Introduction to French Literature I, II) .....	6 hours
3. French 207 (Grammar and Composition) .....	3 hours
4. French 335 or 336 (French civilization) .....	3 hours
5. One other course officially designated as advanced in the <i>LAS Student Handbook</i> .....	3 hours

<sup>1</sup>Establishment of the minor in French was pending final approval at the time of publication.

**Minor in Geology**

The geology minor is designed for students who desire a significant background in Geology to support study and practice of their major field. Selection of courses at the 300-level will depend on the major and interests of the student.

REQUIREMENTS	HOURS
GEOL 107 <sup>1</sup> , 108 <sup>1</sup> .....	8
At least 10 hours in 300-level courses taught within the Department of Geology .....	10
Total required in the minor: at least .....	18

<sup>1</sup> Students who decide to follow the geology minor after first taking GEOL 101 or 111 or 100 and 110 should enroll in GEOL 108; students who decide to follow the geology minor after first taking GEOL 100 (without 110), 104, 105, or 143 should enroll in GEOL 107. The combination of GEOL 101 (or 111 or 100/110) and 102 will be accepted as a substitute for GEOL 107 and 108, but students should be aware these courses are not intended for science majors.

**Minor in German**

The minor in German offers students a background in the language through the advanced undergraduate level; an introduction to the study of German literary classics; and a knowledge of the history of German culture. Requirements: 19 hours of course work beyond GER 104, including the following courses: GER 211 (Conversation and Writing), GER 212 (Conversation and Writing), GER 231 (Introduction to German Literature I), GER 232 (Introduction to German Literature II), GER 301 (Advanced Conversation, Composition, and Syntax), GER 320 (History of German Civilization).

**Minor in History**

A history minor is designed for students who desire to understand the historical background of their major field and to provide an evolutionary or developmental perspective on the study and practice of their major field. Selection of courses will depend on the major and on the interests of the student.

**REQUIREMENTS**

- 1. A minimum of 20 hours is required.
- 2. A maximum of 8 hours of 100-level survey courses is acceptable.
- 3. A minimum of 6 hours at the 300-level taken on the Urbana-Champaign campus is required.

HIST 198 (Freshman Seminar) may be counted as a 200-level course. HIST 290 (Individual Study) may be counted as a 300-level course, but a student must have a 4.5 GPA and the consent of an instructor to enroll. HIST 298 (Colloquium in History) may be counted as a 300-level course. A maximum of 6 hours of study-abroad credit will be accepted, but only at the 200 level. All of the 200- and 300-level work must be completed at a four-year institution.

**Minor in Italian**

The minor in Italian is sponsored by the Department of Spanish, Italian, and Portuguese. See below.

**Minor in Portuguese**

The minor in Portuguese is sponsored by the Department of Spanish, Italian and Portuguese. See below.

**Minor in Russian Language and Literature<sup>1</sup>**

A minor in Russian language and literature may be useful and enriching for students in many disciplines, from economics and political science through comparative literature and theatre to engineering and mathematics. The 18- to 20-hour program listed below provides considerable flexibility within a general structure. Additional information may be obtained from the undergraduate adviser in the Department of Slavic Languages and Literatures, 3092 Foreign Languages Building.

**REQUIREMENTS**

Introduction to Russian literature and culture:	
RUSS 113, 114, 115 or 116 .....	3 hours
Second-year Russian: RUSS 103-104 or equivalent .....	6-8 hours
Third-year Russian: RUSS 200 (reading), 211 (conversation), or 213 (composition) .....	3 hours
19th-century Russian literature: a 300- (or advanced 200-level) course .....	3 hours
20th-century Russian literature: a 300- (or advanced 200-level) course .....	3 hours
Total required hours: .....	18-20 hours

Of the above courses, RUSS 113 through 116 have no prerequisites. RUSS 103 assumes two high-school years, or two college semesters, of elementary Russian (RUSS 101-102 or 111). The specified 200- and 300-level courses have prerequisites contained within the above list of courses acceptable for the minor.

---

<sup>1</sup>Establishment of the minor in Russian language and literature was pending final approval at the time of publication.

**Minor in Sociology<sup>1</sup>**

The minor in sociology is a coherent, comprehensive program of study requiring training in the central aspects of sociology. It requires some depth, but is not as extensive a program as the major. A total of 18 hours of course work in sociology is required. This course work must include:

- 1. SOC 100 (Introduction to Sociology)
- 2. SOC 180 (Social Thought) or SOC 200 (Introduction to Sociological Theory)
- 3. SOC 185 (Introduction to Social Statistics) or equivalent introductory statistics course
- 4. At least two 300-level courses.

---

<sup>1</sup>Establishment of the minor in sociology was pending final approval at the time of publication.

**Spanish, Italian, and Portuguese**

The Department of Spanish, Italian, and Portuguese offers the following minors:

**Minor in Italian**

A minimum of 19 hours of course work beyond ITAL 103.

- 1. ITAL 104, ITAL 210 (Advanced Grammar), ITAL 220 and/or 222 (Conversation I and II).
- 2. At least 6 hours of electives at the advanced level.

**Minor in Portuguese**

A minimum of 19 hours of course work beyond PORT 103 distributed as follows:

- 1. Required courses: PORT 104, PORT 220 (Readings in Portuguese), PORT 210 and/or 212 (Composition and Conversation, I and II).



2. At least 6 hours of electives at the advanced level.

### **Minor in Spanish<sup>1,2</sup>**

A minimum of 18 hours of course work beyond Spanish 104, distributed as follows:

1. SPAN 210 (Practical Review of Spanish), SPAN 214 (Spanish Composition), SPAN 220 (Oral Spanish).
2. At least 9 hours of electives from among courses at the 200 level.

<sup>1</sup>SPAN 200 (Readings in Hispanic Literature and Culture) is a prerequisite to all literature courses.

<sup>2</sup>The following courses may not be included in the minor: SPAN 242, 244, 270, 274, 276, and 279.

## **Minors Pending Final Approval**

The following minors have been approved by the College of Liberal Arts and Sciences and were pending final approval at the time of publication:

- Comparative literature
- Mathematics
- Russian and East European studies

A current list of requirements for minors that have final approval and an updated list of minors pending final approval may be picked up in the LAS Student Office (270 Lincoln Hall).

## **INTERDISCIPLINARY MINORS**

### **Interdisciplinary Minor in African Studies**

The Center for African Studies offers an interdisciplinary minor as a complement to the major for any student enrolled in the sciences and letters curriculum in the College of Liberal Arts and Sciences.

The dean of the College of Liberal Arts and Sciences will verify that the student has completed the program on the recommendation of the director of the Center for African Studies and on completion of the following requirements:

1. Study of, or demonstration of competence in, a foreign language of pertinence to African studies to the level of the LAS foreign language requirement. Languages such as Arabic, Bambara, French, Hausa, Lingala, Portuguese, Swahili, and Wolof are pertinent. A student who chooses to satisfy this requirement with an indigenous African language (e.g. Arabic, Hausa, Lingala, Swahili, or Wolof) may count the second year of language study toward satisfaction of 6 of the total hours required for the interdisciplinary minor.
2. Twenty-one hours of courses drawn from the African studies core courses. These courses normally contain a minimum of 50 percent African content and are defined according to a list maintained and regularly updated by the Center for African Studies.
  - a. One of these courses must be AFRST 222—Introduction to Modern Africa.
  - b. Students may use no more than 6 hours of second year language study for the 21 hours.
  - c. Students must take at least 9 of the 21 hours in courses approved for advanced hours (300-level or approved 200-level courses).
  - d. Students must take courses from at least two separate departments in addition to those of the center.
3. A minimum grade-point average of 3.75 in African studies courses is required for completion of the minor.

The 21 hours selected by students for the African studies minor should form a coherent program of study. This program must be approved by the Center for African Studies.

### **Interdisciplinary Minor in Afro-American Studies**

The Afro-American Studies and Research program offers an interdisciplinary minor as a complement to the major for any student enrolled in the sciences and letters curriculum in the College of Liberal Arts and Sciences. This minor represents a coherent vehicle for students who wish to structure and formalize their study of Afro-American subjects as part of their liberal education. The minor provides a strong intellectual complement to majors in various humanities and social sciences disciplines as well as to majors in preprofessional programs including law, medicine, social work, education, business, and urban planning.

On the recommendation of the director of Afro-American Studies, the dean of the College of Liberal Arts and Sciences will verify in writing that the student has completed the minor. The requirements are listed below.

## REQUIREMENTS

1. Twenty-one hours of courses drawn from courses in the Afro-American studies core, which consists of program courses and approved courses from other departments.
  - a. All students must take the three required core courses: AFRO 100, 224, and 244.
  - b. A student may use no more than one course in addition to AFRO 100 from the 100-level course offerings.
  - c. Students must complete 3 to 6 hours of approved 200-level courses.
  - d. Students must complete at least 6 hours of approved 300-level courses.
2. A minimum grade-point average of 3.75 (A = 5.0) is required for completion of courses taken in this program.
3. A student's plan of courses for the minor must be approved by the Afro-American Studies and Research Program.

## Interdisciplinary Minor in Latin American Studies

The Center for Latin American and Caribbean Studies offers an interdisciplinary minor as a complement to the regular major for any student enrolled in a major other than Latin American studies in the sciences and letters curriculum in the College of Liberal Arts and Sciences.

The dean of the College of Liberal Arts and Sciences will verify that the student has completed the program on the recommendation of the director of the Center for Latin American and Caribbean Studies and on completion of the following requirements:

1. Two courses (5 or 6 semester hours) in a Latin American language (Spanish, Portuguese, or Quechua) beyond the level specified by the LAS language requirement, or the equivalent as demonstrated by special examination. At the end of their language study, all students are urged to take an oral proficiency test based on ACTFL guidelines.
2. Fifteen semester hours of courses drawn from the Latin American studies curriculum. The curriculum normally consists of courses with 50 percent or more Latin American content and is defined according to a list maintained and regularly updated by the Center for Latin American and Caribbean Studies.
  - a. One of these courses must be LA ST 170—Introduction to Latin America.
  - b. No more than 6 hours may be chosen from a single department.
  - c. Six of the hours must be chosen from the 300-level course offerings.
  - d. Up to 6 hours of literature, but not language, courses may be applied toward the total of 15 hours.
3. The 21 hours selected by students for the interdisciplinary minor in Latin American studies should form a coherent program of study. This program must be approved by the adviser of the Center for Latin American and Caribbean Studies.

## Interdisciplinary Minor in Women's Studies

The Office of Women's Studies offers an interdisciplinary minor as a complement to the major for any student enrolled in a major in the sciences and letters curriculum in the College of Liberal Arts and Sciences.

The dean of the College of Liberal Arts and Sciences will verify in writing that the student has completed the program on the recommendation of the director of the Office of Women's Studies and completion of the following requirements:

### REQUIREMENTS

1. Twenty-four hours in women's studies courses, including:
  - a. WS 111—American Women in Change: An Introduction,
  - b. WS 112—Introduction to Women's Studies in the Social Sciences, and
  - c. Eighteen hours in other women's studies courses (see the Office of Women's Studies for a list of acceptable courses), with 9 hours in advanced courses (i.e., 300-level or designated 200-level) and 9 hours in courses offered by or cross listed in women's studies.
2. A minimum grade-point average of 3.75 (A = 5.0) is required for completion of this program. The 18 hours selected by students for the women's studies minor should form a coherent program of study. This program must be approved by the Office of Women's Studies.

## Specialized Curricula

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some change in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.



CURRICULUM IN BIOCHEMISTRY

For the Degree of Bachelor of Science in Biochemistry

A total of at least 120 semester hours of course work as outlined below, with a minimum 3.0 (A = 5.0) academic grade-point average required for graduation. In addition, in order to graduate, students must attain a 3.0 average in the chemistry, biochemistry, mathematics, physics, and advanced electives in life science courses specified in this curriculum. All proposals for substitutions must be approved by the faculty adviser. This curriculum is intended for those students who desire a rigorous education in chemistry, biochemistry, and the life sciences, but whose career objectives require sufficient flexibility to obtain proficiency in other areas as well.

The departmental distinction program is intended for the exceptional student who intends to enter graduate school or a highly technical academic, governmental, or industrial research laboratory after completion of undergraduate study.

For information regarding the cooperative education program in the School of Chemical Sciences, see the chemistry major in the sciences and letters curriculum on page 256.

REQUIREMENTS<sup>1,2</sup>

HOURS

CHEM 107, 108, 109, 110, 131, 134, 336, and one year of physical chemistry (340 and 346, or 342 and 344)	25-26
BIOCH 352, 353, and 355	12
MATH 120, 132, and 242, or equivalent	11
PHYCS 101 and 102 or PHYCS 106, 107, and 108	10-12
Advanced electives in life sciences (300 level)	6
Foreign language—see the sciences and letters curriculum requirements on page 250 for ways the requirement may be satisfied	0-16
Rhetoric (4 hours), humanities (6 hours), and social sciences (6 hours)	16
Technical and/or nontechnical electives, not including any credit in satisfaction of the above requirements, to obtain a total of 120 semester hours	21-40
Minimum total	120

**Departmental Distinction.** In addition to meeting the above requirements, a student seeking distinction must satisfy the following:

- 1. Earn at least a 4.0 (A = 5.0) grade-point average.
- 2. Complete 10 hours of BIOCH 292 in addition to the minimum 120 hours required for the degree.
- 3. Present a thesis for deposit in the College of Liberal Arts and Sciences.

<sup>1</sup>Certain courses may be substituted for those listed. For example, CHEM 101, 102, and 123 may be substituted for the CHEM 107-110 sequence with the approval of an adviser.  
<sup>2</sup>A more complete description of the requirements is listed in the *Biochemistry Curriculum* brochure, available in 401 Roger Adams Laboratory.

CURRICULUM IN CHEMICAL ENGINEERING

For the Degree of Bachelor of Science in Chemical Engineering

The chemical engineering curriculum is arranged in a flexible manner to permit students to use their elective hours and to substitute courses to arrange programs incorporating various specific areas of chemical engineering or interdisciplinary areas. For example, sequences can be set up in conjunction with the student's adviser to emphasize environmental engineering, engineering practice, computer science, or one of many other options. It will be advantageous to the student to plan course sequences with an adviser as early in the student's academic career as possible.

Students entering without adequate preparation in mathematics and chemistry may find it difficult to complete the chemical engineering curriculum in four years. A typical program, including all required courses and electives, is shown below. Individual students may vary the order in which the various courses are taken to suit their individual needs. However, care must be exercised in scheduling to ensure that necessary course prerequisites are met.

A total of 129 hours is required for graduation, as shown below.

Students in the curriculum of chemical engineering must maintain a 3.5 general average, excluding military training, in order to be accepted by the department as juniors and seniors.

**Departmental Distinction.** A student is recommended for departmental distinction on the basis of grade-point average and work presented in CHE 292—Senior Thesis or CHE 390—Projects.

**FIRST YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CHEM 107 <sup>1</sup> —Accelerated Chemistry I .....	3
CHEM 109—Accelerated Chemistry Laboratory I .....	2
MATH 120—Calculus and Analytic Geometry I ...	5
RHET 105 or 108—Composition .....	4
Elective <sup>2,3</sup> .....	3
Total .....	17

**SECOND YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CH E 261—Introduction to Chemical Engineering .....	3
CHEM 136—Basic Organic Chemistry .....	3
CHEM 181—Structures and Synthesis .....	2
MATH 242—Calculus of Several Variables .....	3
PHYCS 107—General Physics (Heat, Electricity, and Magnetism) .....	4
Total .....	15

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CH E 371—Fluid Mechanics and Heat Transfer .	4
CHEM 342—Physical Chemistry I .....	4
CHEM 383—Dynamics, Structure, and Physical Methods .....	2
Electives <sup>2,6</sup> .....	6
Total .....	16

**FOURTH YEAR**

<b>FIRST SEMESTER</b>	<b>HOURS</b>
CH E 389—Chemical Process Control and Dynamics .....	3
CH E 374—Chemical Engineering Laboratory ....	3
CH E 381—Chemical Rate Processes and Reactor Design .....	2
Electives <sup>2,6</sup> .....	9
Total .....	17

**FIRST YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CHEM 108—Accelerated Chemistry II .....	3
CHEM 110—Accelerated Chemistry Laboratory II .....	2
MATH 132—Calculus and Analytic Geometry II ..	3
MATH 225 <sup>4</sup> —Introductory Matrix Theory .....	2
PHYCS 106—General Physics (Mechanics) .....	4
CH E 161—The Chemical Engineering Profession .....	1
Total .....	15

**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CH E 370—Chemical Engineering Thermodynamics .....	3
CHEM 336 <sup>5</sup> —Fundamental Organic Chemistry II .....	3
CS 101—Introduction to Computers for Application to Engineering and Physical Science .....	3
PHYCS 108—General Physics (Wave, Motion, Sound, Light, and Modern Physics) .....	4
MATH 285—Differential Equations and Orthogonal Functions .....	3
Total .....	16

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CH E 373—Mass Transfer Operations .....	4
CHEM 344—Physical Chemistry II .....	4
CHEM 385—Chemical Fundamentals .....	4
Electives <sup>2,6</sup> .....	4
Total .....	16

**FOURTH YEAR**

<b>SECOND SEMESTER</b>	<b>HOURS</b>
CH E 390—Individual Chemical Engineering Projects .....	2
CH E 377—Synthesis and Design of Chemical Systems .....	3
Electives <sup>2,6</sup> .....	12
Total .....	17

<sup>1</sup>Students who do not place into CHEM 107, or who do not satisfy the mathematics prerequisite for CHEM 107, may substitute the sequence CHEM 101, 102, and 123 for CHEM 107, 108, 109, and 110.

<sup>2</sup>A total of 16 hours of approved social sciences and humanities electives are required. This must include a sequence of at least 6 hours in social sciences and a sequence of at least 6 hours in humanities. A sequence is usually interpreted to mean any combination of approved courses taught by the same department. Students should consult their departmental advisers for a current list of courses that may be used to satisfy this requirement.

<sup>3</sup>One year of college credit in one foreign language is required. Two units of high school credit in one foreign language are equivalent to one year of college credit.

<sup>4</sup>Students may substitute MATH 315 for MATH 225. Students electing to do so should be certain that they have the prerequisites for MATH 315.

<sup>5</sup>BIOCH 350 may be substituted for CHEM 336.

<sup>6</sup>Students must take at least 18 hours of technical electives in fields such as chemical engineering science. These must include at least 5 hours of chemical engineering electives plus at least 3 additional hours of 300-level electives (or CH E 292). Students should consult their departmental advisers for a current list of courses that may be used to satisfy this requirement.



CURRICULUM IN CHEMISTRY

For the Degree of Bachelor of Science in Chemistry

The professional curriculum in chemistry affords more thorough technical training than is required of students who make chemistry their major in the sciences and letters program described on page 256.

For the degree of Bachelor of Science in chemistry, completion of each of the seven categories (1 through 7) listed below is required for graduation. The typical program of courses required to satisfy these categories totals from 128 to 134 hours. Graduation requires grade-point averages of at least 3.0 (A = 5.0) overall and 3.0 in courses for categories 1 through 4. A total of at least 120 hours is required for graduation. The Department of Chemistry will supply upon request a brochure showing recommended semester-by-semester programs for the completion of the curriculum.

Each graduate of the professional curriculum in chemistry is certified to the American Chemical Society as having met its specifications for professional education in chemistry.

**Departmental Distinction.** Students qualify for graduation with distinction by exhibiting superior performance in both course work and in senior thesis research. To be eligible, a student must have an overall grade-point average of at least a 4.0 and must complete a senior thesis course.

REQUIREMENTS

HOURS

- 1. Core chemistry: CHEM 107, 108, 109, 110<sup>1</sup>, 136, 181, 315, 336, 342, 344, 383, and 385 ..... 35<sup>2</sup>
- 2. Basic mathematics: MATH 120, 132, and 242; or MATH 135 and 245 ..... 11<sup>2</sup>
- 3. Basic physics: PHYCS 106, 107, and 108 ..... 12<sup>2</sup>
- 4. Additional technical requirements: at least 24 hours to include the following: ..... 24
  - a. Required chemistry/biochemistry—at least 10 hours of 300-level chemistry/biochemistry, including 4 hours of laboratory.
  - b. Required mathematics—MATH 388; or one of the following combinations: MATH 225 with either 280 or 285, or MATH 315 with either 280 or 285.
  - c. Strongly recommended: computer science, at least 3 hours.
  - d. Strongly recommended: research—CHEM or BIOCH 292. This will reduce the amount of laboratory work required in the 10 hours of 300-level chemistry/biochemistry from 4 to 2 hours.
  - e. Others as needed to complete the 24-hour minimum, chosen from CHEM 199 (3 hours maximum); BIOL 151; MATH 249 or higher; 200- or 300-level courses in chemistry, chemical engineering, life sciences, and/or physics. Certain other technical electives, including engineering courses, may be included with the approval of the chairperson of the advising committee.
- 5. Nontechnical requirements ..... 16-18<sup>2</sup>
  - a. Foreign language—two high school units or two semesters of college work in a single language.
  - b. RHET 105 or 108, or SPCOM 111 and 112.
  - c. Humanities, at least 6 hours.
  - d. Social sciences, at least 6 hours.
- 6. Free electives: At least 32 of these hours must not include credit in satisfaction of categories 1 through 5 nor be in preparation for categories 1 through 3. For example, CHEM 100 may not be included in the first 32 hours. No first-year foreign language courses count toward this category unless the language is different from the one used for the foreign language requirement ..... 32
- 7. Total hours, at least ..... 120

<sup>1</sup>CHEM 101, 102, and 123 may be substituted for CHEM 107, 108, 109, and 110.

<sup>2</sup>Hours given are those normally needed to meet the specified requirements.

Cooperative Education Program in Chemistry

See the section on the chemistry major in the sciences and letters curriculum on page 256.

CURRICULUM IN GEOLOGY AND GEOPHYSICS

For the Degree of Bachelor of Science in Geology

The curriculum in geology and geophysics is designed for students who plan to pursue graduate study in geology or geophysics. It consists of geology and geophysics options, and offers more training in geology and related science than is required of students who make geology their major in the sciences and letters curriculum described on page 264.

Graduation requires a grade-point average of at least 3.0 (A = 5) overall and a 3.0 average in courses for requirements A through E outlined below. A total of 126 semester hours of credit is required for graduation. The Department of Geology will supply upon request a *Guide for Geology Undergraduates* giving more information about the curriculum.

GEOLOGY OPTION REQUIREMENTS	HOURS
A. Geology: GEOL 107 <sup>1</sup> , 108 <sup>1</sup> , 311, 317 <sup>2</sup> , 320, 332, 336, 340, 352, 360, and six additional hours of 300-level geology .....	45 <sup>3</sup>
B. Physics: PHYCS 106 and 107 (or 101 and 102) .....	8 <sup>4</sup>
C. Mathematics: MATH 120, 132, 242, and 225 .....	13
D. Chemistry: CHEM 101 and 102 (or 107, 108, 109, 110) .....	8 <sup>4</sup>
E. Additional technical requirement: At least 3 hours from BIOL 110, PHYCS 108, CS 101 or 121, MATH 263, 280, 285, or 341 .....	3 <sup>4</sup>
F. Nontechnical requirements: .....	19-35
1. Foreign Language: See the sciences and letters curriculum requirements on page 250 for ways in which the requirement may be satisfied (0-16 hours).	
2. RHET 105 or 108 or SPCOM 111 and 112.	
3. General education: LAS Area I requirements (see p. 239)	
G. Free electives: .....	14-30
Cannot include credit in satisfaction of the above requirements nor in courses taken preparatory to the science and mathematics requirements.	
H. Total hours .....	126

GEOPHYSICS OPTION REQUIREMENTS	
A. Geology: GEOL 107 <sup>1</sup> , 108 <sup>1</sup> , 350, and 10 additional hours of 300-level geology .....	22
B. Physics: PHYCS 106, 107, 108, and 331 .....	17
C. Mathematics: MATH 120, 132, 242, 225 (or 315), 280, and 285 .....	19 <sup>4</sup>
D. Chemistry: CHEM 101 and 102 (or 107, 108, 109, 110) .....	8 <sup>4</sup>
E. Additional technical requirements: .....	12 <sup>4</sup>
F. Nontechnical requirements .....	19-35
1. Foreign Language: See the sciences and letters curriculum requirements on page 250 for ways in which the requirement may be satisfied (0-16 hours).	
2. RHET 105 or 108 or SPCOM 111 and 112.	
3. General education: LAS Area I requirements (see p. 239)	
G. Free electives: .....	13-29
Cannot include credit in satisfaction of the above requirements nor in courses taken preparatory to the science and mathematics requirements.	
H. Total hours .....	126

**Departmental Distinction.** Students who maintain a grade-point average of at least 4.5 in all geology courses and 4.0 in all other science and mathematics courses and who complete an acceptable senior thesis, including at least 4 hours credit in GEOL 292 or 293, are recommended for graduation with distinction.

<sup>1</sup>Students who decide to follow the curriculum in geology and geophysics after first taking GEOL 101 or 111 or 100 and 110 should enroll in GEOL 108; students who decide to follow the curriculum after first taking GEOL 100 (without 110), 104, 105, or 143 should enroll in GEOL 107. The combination of GEOL 101 and 102 will be accepted as a substitute for GEOL 107 and 108, but students should be aware these courses are not intended for science majors.  
<sup>2</sup>GEOL 317 is a 6-hour summer field course taught off campus.  
<sup>3</sup>Students transferring into the geology option from another science or engineering program may substitute up to 8 hours of 300-level science or engineering credits for 8 hours of 300-level geology courses with departmental approval.  
<sup>4</sup>Hours given are those normally needed to meet the specified requirements.

CURRICULUM IN PHYSICS

For the Degree of Bachelor of Science in Physics

The curriculum in physics is recommended for students who plan to enter graduate study in physics or who wish to enter government or industrial laboratory research positions upon attaining the bachelor's degree (see also the curriculum in engineering physics, the LAS major in physics, and the LAS curriculum in the teaching of physics).  
A minimum of 126 hours of credit is required for graduation. To be permitted to register in advanced physics or mathematics courses in this curriculum, a student must have a grade-point average of at least 3.5 (A = 5.0) in all subjects excluding military science and a grade-point average of at least 3.5 in all courses completed in physics and mathematics.<sup>1</sup>



Entering freshmen normally take mathematics, chemistry, a foreign language, and either rhetoric or an elective in the first semester and begin physics in the second semester. Students with advanced placement in mathematics should start physics in the first semester. Suggested four-year schedules are available in the physics undergraduate records office.

REQUIREMENTS	HOURS
CHEM 101 and 102 (CHEM 107, 108, 109, and 110 may be substituted by students who desire a more rigorous sequence) .....	8
MATH 120, 132, and 242, or equivalent; and MATH 280 and 285 (students with insufficient background may need to take MATH 116 before MATH 120, but receive no credit toward the degree) .....	17
PHYCS 106, 107, 108, 210, 331, 332, 333, 386, 387, and one course chosen from PHYCS 303, 343, 361, 365, 371, 382, 389 .....	40
RHET 105 or 108 .....	4
General education. (five courses chosen to meet the Area I general education requirements of the science and letters curriculum, and one Area II course from either biological science or behavioral science) .....	18
Foreign language (a reading knowledge of a modern foreign language. German, French, or Russian is recommended. See the sciences and letters curriculum foreign language requirement on page 250 for ways in which this requirement may be satisfied) .....	16
Free electives (students are advised to include 6 to 8 hours of physics and 3 to 6 hours of mathematics among their electives) .....	23
Total .....	126

**Departmental Distinction.** Graduation with distinction is awarded to students who complete 8 additional hours of 300- or 400-level physics courses or advanced courses in closely related technical subjects, such as nuclear engineering, solid-state electronics, astrophysics, and who have attained cumulative grade-point averages as follows: distinction, 4.2; high distinction, 4.5; highest distinction, 4.8.

<sup>1</sup>A new statement regarding the GPA restrictions for the physics curriculum will be effective August 1992. Students should consult their advisers for more information.

CURRICULUM IN SPEECH AND HEARING SCIENCE<sup>1</sup>

For the Degree of Bachelor of Science in Speech and Hearing Science

The curriculum in speech and hearing science is a preprofessional degree program for those individuals who plan to work as speech-language pathologists and audiologists in clinical or school settings. The curriculum is designed to prepare the student to enter professional training at the graduate level in any major graduate program in speech/language pathology or audiology. Students who desire certification for work in the public schools can fulfill certification requirements by meeting entrance requirements for the Graduate College and completing the Master of Science degree. To qualify for registration in courses specified for the first semester of the senior year, the student must have a grade-point average of no less than 3.75 (A = 5.0). The degree requires at least 128 hours, excluding military training.

A student not wishing to pursue teacher certification or a clinical program should refer to the major in speech and hearing science on page 291.

GENERAL EDUCATION REQUIREMENTS	HOURS
SPCOM 111 and 112, or RHET 105 and SPCOM 101, or RHET 108 and SPCOM 101 .....	6-7
Biological science .....	6-8
Physical science .....	6-8
American history <sup>1</sup> .....	3
American government (state and federal constitutions) .....	3
Foreign language (see sciences and letters curriculum requirements for ways in which this requirement may be met) .....	0-16
Health and/or physical education activity .....	3
Humanities .....	6
Total .....	33-54

PROFESSIONAL EDUCATION

For students planning to pursue the school speech and hearing program, the following are recommended:

**HOURS**

Exceptional children .....	3-6
Classroom problems in childhood education and special education .....	3
Mental and educational measurement of exceptional children .....	3
Total .....	9-12

**REQUIREMENTS FOR THE MAJOR**

**HOURS**

Psychology and linguistics:	
PSYCH 235—Statistical thinking in psychology .....	5
PSYCH 216 or EDPSY 236—Child psychology or child development .....	3
PSYCH 250 or 238—Psychology of personality or abnormal psychology .....	3
PSYCH 248 or 224—Psychology of learning or cognitive psychology .....	3
LING 200—Introduction to language science .....	3
Total .....	17
Speech and hearing science:	
SPSHS 105—Voice and articulation .....	2
SPSHS 102—Human Communication: Systems, Processes, and Disorders .....	3
SPSHS 301—General phonetics .....	3
SPSHS 375 and 376—Speech science .....	8
SPSHS 383—Development of spoken language .....	3
SPSHS 378—Hearing science .....	3
SPSHS 385 and 388—Speech pathology .....	6
SPSHS 386—Language disorders in children .....	3
SPSHS 389—Appraisal in speech pathology .....	3
SPSHS 390—Introduction to hearing disorders and audiometry .....	4
SPSHS 393—Aural rehabilitation .....	3
SPSHS 387—Beginning Practicum in Speech-Language Pathology (3) and SPSHS 380—Prepracticum in Speech-Language (2) .....	5
Total .....	46

**Recommended Elective Areas.** These include psychology, education, physiology, linguistics, psycholinguistics, special education, and education of the deaf.

**Departmental Distinction.** To graduate with distinction, a student must have at least a 4.25 cumulative grade-point average and a 4.5 grade-point average in speech and hearing courses and must:

1. Complete 4 hours of SPSHS 291 (in addition to the minimum hours required for the degree), and receive faculty recommendations; or
2. Pass a comprehensive written and/or oral examination.

Detailed statements of requirements, as well as requirements for graduation with high distinction and highest distinction, are available in the department office.

---

<sup>1</sup>Students not planning to fulfill teacher certification requirements for the school speech and hearing science program may substitute an approved social sciences sequence for American history and American government.

***Teacher Education Curricula***

This section contains a description of the requirements for programs leading to the bachelor's degree in teacher education. More detailed information pertaining to specific course requirements for each area of specialization is provided by faculty advisers. It is essential that the student fulfill the specific course requirements of his or her program in order to be eligible for the bachelor's degree in teacher education. Only through regular communication with the teacher education adviser may the student be assured of the appropriateness of his or her semester program. Students are advised that certification requirements may be altered at any time by the State Teacher Certification Board or by the legislature. In such cases, students may be compelled to satisfy the new requirements to qualify for the University's recommendation for certification. Also see Council on Teacher Education on page 87 for information pertinent to all teacher education curricula.

General education requirements of the College of Liberal Arts and Sciences must be fulfilled by students pursuing teacher education curricula in that college. If the requirements of the teaching major satisfy the general education requirements in an area, they will be noted in the



curriculum statement. For more information, consult the certification officer (120 Education Building).

### **GENERAL EDUCATION REQUIREMENTS<sup>1</sup>**

The state of Illinois has mandated completion of certain general education requirements for all students applying for certification on or after July 1, 1992. These state requirements will be included in the degree requirements for the LAS teacher education programs as the programs are revised effective August 1991. The description below reflects the program revisions that were pending final approval at the time of publication of this catalog. Students should contact their advisers to be sure of degree and certification requirements in their particular areas.

Students in LAS undergraduate programs leading to secondary and special certification will be expected to complete the following:

#### **Distribution**

Communication: RHET 105 or 108, SPCOM 101 or a speech performance elective, and one writing intensive course (UIUC) (1 hour credit shown as writing on the transcript). *Alternatively*, students may complete RHET 105 or 108, SPCOM 101 or a speech performance elective, and an additional rhetoric or writing course (equal to or greater than 2 hours), such as RHET 133 or RHET 143; or SPCOM 111-112 and an additional rhetoric or writing course (equal to or greater than 3 hours), such as RHET 133 or RHET 143.

Foreign language: Students are expected to obtain knowledge of a foreign language equivalent to the completion of the fourth semester of college study in a language. The requirements can be satisfied in the same manner as the language requirement for the sciences and letters curriculum. A complete list of ways to satisfy this requirement is on page 250.

Literature: one course

American history: one course

American government: one course

One additional course chosen from literature and the arts, historical and philosophical perspectives, or social perspectives

Non-Western culture: one course

Biological science: one course\*

Physical science: one course\*

One additional course in biological or physical science\*

Mathematics: one course

PSYCH 100 or equivalent

Physical development or health education: 2 hours

---

\*One of the science courses must have a laboratory.

In addition, to satisfy state certification requirements, a student must show on his or her transcript at least 15 hours in humanities courses. By the state definition, humanities courses are those in American history, English, history, literature, foreign language (including first- and second-year language courses for the foreign language requirement), art, music, theatre, linguistics, and philosophy. While most students in LAS teacher education programs will automatically have at least 15 hours of humanities under the state's definition, students should review their programs to ensure they do so. Any courses used for other requirements (foreign language, distribution requirements above, teaching major, teaching minors, etc.) may be counted in the 15 hours.

---

<sup>1</sup>Students entering as freshmen in August 1991 or later will be required to follow the new general education requirements for teacher education curricula reflected in this statement. These general education requirements were pending final approval at the time of publication.

### **CURRICULUM PREPARATORY TO THE TEACHING OF BIOLOGY<sup>1</sup>**

#### **For the Degree of Bachelor of Science in the Teaching of Biology**

While this curriculum is primarily designed for students preparing to teach biology, it also permits the breadth of work in the sciences required for teaching general science. A minimum of 125 hours is necessary for graduation. In addition, a student must have at least 3.5 (A = 5.0) cumulative and University of Illinois grade-point averages to remain in the curriculum. A student must also maintain at least a 3.0 grade-point average in all attempts at science and

mathematics courses taken at the University of Illinois in order to remain in the curriculum.

Exemptions will be granted in language and mathematics, depending upon the student's high school experience. While the student is no longer required to complete a teacher education minor, anyone desiring a minor must select it from the list on page 318. The requirements for the minor in general science are fulfilled by those completing this curriculum.

**Departmental Distinction.** To graduate with distinction the student must have at least a 4.5 grade-point average for all work completed, and present a letter from his or her student teaching evaluator as evidence of excellent performance in student teaching capacity.

### GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

### PROFESSIONAL EDUCATION REQUIREMENTS

	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Techniques of Teaching in the Secondary Schools (C&I 241) .....	4-5
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	26-30

### REQUIREMENTS OF THE MAJOR<sup>1</sup>

	HOURS
Mathematics	
College algebra and trigonometry .....	5
Statistics .....	3-4
Chemistry	
General .....	8-10
Organic .....	5
Physics .....	10
Biology	
General .....	10
Advanced (200- and 300-level courses or equivalent)	
Genetics .....	4
Microbiology .....	6-8
Animal or plant physiology .....	5-6
Invertebrate biology .....	3-5
Vertebrate biology .....	3-5
Plant biology .....	3-5
Environmental biology .....	3-5
Total .....	68-82

<sup>1</sup>This statement does *not* reflect a revision of the teaching major that was pending approval at the time of publication.

## CURRICULUM PREPARATORY TO THE TEACHING OF CHEMISTRY

### For the Degree of Bachelor of Science in the Teaching of Chemistry

This curriculum is designed to prepare the student to teach physical science with a major in chemistry and a second teaching field in physics or mathematics. A minimum of 130 hours of credit is required for graduation. In addition, a student must have at least 3.5 (A = 5.0) cumulative and University of Illinois grade-point averages to remain in the curriculum. A student must also maintain at least a 3.0 grade-point average in all attempts at science and mathematics courses taken at the University of Illinois in order to remain in the curriculum.

A student must elect a second teaching field in either mathematics or physics. Regardless of the second teaching field, the curriculum requires the completion of the general physics sequence, including PHYCS 107, and one year of calculus. Students choosing a second teaching field in mathematics shall complete the Teacher Education Minor in Mathematics (see page 320). The second teaching field in physics shall consist of 6 hours of 300-level physics beyond the elementary courses.



**Departmental Distinction.** Students in this curriculum may earn distinction, high distinction, or highest distinction in the teaching of chemistry. Distinction is awarded on the basis of performance in student teaching and academic achievement.

**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Techniques of Teaching in the Secondary Schools (C&I 241) .....	4-5
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	26-30

**REQUIREMENTS OF THE MAJOR**

The sequence of chemistry courses chosen by the student is somewhat flexible and depends upon previous educational experience as well as other factors. The following two sequences of chemistry courses are recommended. The first is the less rigorous program and might be followed by a student whose high school background is not particularly strong. The second is similar to that followed by students in the chemistry curriculum. An intermediate program involving other courses may be chosen with the consent of the departmental adviser; but, in all cases, the course program should include a course in physical chemistry and two additional courses at the 300 level, and at least 30 hours of chemistry (excluding CHEM 100).

**SUGGESTED SEQUENCES**

**First Sequence**

General chemistry .....	8
Elementary quantitative analysis .....	3
Basic organic chemistry and structure and synthesis (CHEM 136 and 181) .....	5
Physical chemistry .....	4
Additional chemistry .....	12
Total .....	32

**Second Sequence**

General chemistry .....	10
Organic chemistry .....	6
Structures and Synthesis (CHEM 181) .....	2
Inorganic Chemistry (CHEM 315) .....	3
Physical chemistry .....	6
Dynamics, Structure, and Physical Methods (CHEM 383) .....	2
Additional chemistry .....	3
Total .....	32

**CURRICULUM PREPARATORY TO THE TEACHING OF COMPUTER SCIENCE**

**For the Degree of Bachelor of Science in the Teaching of Computer Science**

This program offers training for teaching computer science in the schools. A minimum of 120 hours is required for graduation. It is strongly recommended that a student electing the computer science teacher education major also elect an approved teaching minor in mathematics.

**Departmental Distinction.** Students interested in attaining departmental distinction should consult with the honors adviser for program requirements early in the junior year.

**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the mathematics requirement by the requirements of the major. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	1
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	1
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	23-26

**REQUIREMENTS OF THE MAJOR**

Computer science (programming) .....	10
Introduction to Computer Programming (CS 121)	
Computer Architecture II (CS 232)	
Data Structures (CS 225)	
Computer science (elective concentration areas) <sup>1</sup> .....	12
At least 12 semester hours chosen from among 200- and 300- level computer science courses, with at least 6 semester hours at the 300-level	
Computer-Assisted Instruction (CS 317) .....	4
Goal-directed sequence in applications of computing .....	12
Course program planned on an individual basis to reflect interests/strengths in disciplines experiencing significant applications of computers (e.g., business, economics, science, instructional applications, administrative data processing) <sup>2</sup>	
Calculus through MATH 242 or equivalent .....	10-11
Total .....	48-49

<sup>1</sup>Sample list of suitable computer science electives: programming—CS 323, 325, 326, 327, 310, 311, 318; logic design and computer architecture—CS 231, 331, 333, 337, 338, 339, 362, 363, 364; numerical analysis—CS 257, 355, 358, 359; theory—CS 273, 313, 373, 375; hardware—CS 281, 335, 381, 384, 389; general—CS 296, 297, 397.

<sup>2</sup>Such a sequence should be selected in consultation with, and must be approved by, the student's adviser. Some courses may require additional background or prerequisites, in which case the student is urged also to consult with the departments offering the courses in question.

**CURRICULUM PREPARATORY TO THE TEACHING OF EARTH SCIENCE**

**For the Degree of Bachelor of Science in the Teaching of Earth Science**

This curriculum is designed for students preparing to teach earth science as their major area of specialization. Students in this curriculum are required to complete a teaching minor in biology, chemistry, general science, mathematics, or physical science.

Including general and professional education requirements, the courses outlined below total 132 to 151 hours; the minimum number of hours required for graduation is 131. Students must complete 30 hours of advanced courses. In addition, a student must have at least 3.5 (A = 5.0) cumulative and University of Illinois grade-point averages to remain in the curriculum. A student must also maintain at least a 3.0 average in all attempts at science and mathematics courses taken at the University of Illinois in order to remain in the curriculum.

**Departmental Distinction.** See the geology major for requirements.

**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Techniques of Teaching in the Secondary Schools (C&I 241) .....	4-5
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	26-30



REQUIREMENTS OF THE MAJOR	HOURS
Earth sciences	
General geology (GEOL 107, 108) <sup>1</sup>	8
Minerals and Mineral Optics (GEOL 332)	4
Paleontology or sedimentology and stratigraphy (GEOL 320 or 340)	3 or 4
Regional field study (GEOL 115)	2
Weather and Climate (GEOG 102)	4
General Astronomy <sup>2</sup> (ASTR 210)	3
Electives <sup>3</sup>	8
Supporting sciences (may fulfill, in part, the teacher education minor)	
General chemistry	4
Mathematics <sup>4</sup>	2-5
Principles of biology	5
General Physics (Light, Electricity, Magnetism, and Modern Physics) (PHYCS 101)	5
Total	48-52

REQUIREMENTS OF THE TEACHER EDUCATION MINOR

A student in this curriculum is required to complete a teacher education minor in biology, chemistry, general science, mathematics, or physical science. (See pages 318 to 322.)

<sup>1</sup>Students who decide to follow the earth science teaching curriculum after first taking GEOL 101 or 111 or 100 and 110 should enroll in GEOL 108; students who decide to follow the curriculum after first taking GEOL 100 (without 110), 104, 105, or 143 should enroll in GEOL 107. The combination of GEOL 101 (or 111 or 100/110) and 102 will be accepted as a substitute for GEOL 107 and 108, but students should be aware these courses are not intended for science majors.

<sup>2</sup>Students who do not take a year of physics should take descriptive astronomy.

<sup>3</sup>A minimum of 8 additional hours in earth science is required. Recommended courses are introductory soils, oceanography, geomorphology, and other appropriate advanced courses in agronomy, astronomy, geology, and geography.

<sup>4</sup>Mathematics through trigonometry is required. Calculus and analytic geometry are recommended for all students.

CURRICULUM PREPARATORY TO THE TEACHING OF ENGLISH<sup>1</sup>

For the Degree of Bachelor of Arts in the Teaching of English

A minimum of 128 hours is required for graduation in this curriculum. The student is required to complete one teaching minor or to fulfill requirements for an alternative to a minor. A student who elects the teacher education major in literature must complete the teacher education minor in rhetoric or in English as a second language.

**Departmental Distinction.** Distinction will be awarded on the basis of grade-point average and satisfactory completion of honors, individual study, and honors thesis courses. See the English education adviser for a detailed statement of the requirements.

GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major. Students must elect a course in oral interpretation of literature.

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Preliminary Field Experience in Secondary Teaching (C&I 209)	0
Introduction to the Teaching of Secondary School Subjects (C&I 101)	2
Field Experience in Secondary Teaching (C&I 219)	2
Secondary Education in the United States (C&I 240)	2
Microteaching: Practice in Teaching Techniques (C&I 239)	2
Exceptional Students in Secondary Schools (SP ED 218)	1
Field Experience in Secondary Education (C&I 229)	2
Educational Psychology (EDPSY 211)	3
Foundations of American Education (EPS 201)	3
Teaching of Reading in Grades Four through Twelve (C&I 372)	3
Techniques of Teaching in the Secondary Schools (C&I 241)	4
Educational Practice in Secondary Education (ED PR 242)	5-8
Total	29-32

**REQUIREMENTS OF THE MAJOR**

**Option 1: Teacher Education Major in English**

ENGL 101 and one of the following: ENGL 102, 103, 198 .....	6-7
Shakespeare .....	3
Survey of American literature .....	6
Survey of English literature .....	6
Practical Criticism (ENGL 215) .....	3
Descriptive English Grammar (ENGL 302) .....	3
Introduction to the Study of the English Language (ENGL 301), or Historical Introduction to the English Language (ENGL 303) .....	3
Theory and Practice of Written Composition (ENGL 381) .....	3
Literature for the High School (ENGL 385) .....	3
Advanced electives in literature .....	6
Total .....	42-43
Any approved teacher education minor (see page 318) or an approved alternative to a minor (see an adviser for details) .....	18-30

**Option 2: Teacher Education Major in Literature**

Available only with the teacher education minor in rhetoric or in English as a Second Language.	
A minimum of six hours chosen from ENGL 101, 102, 103, 198 .....	6-7
Shakespeare .....	3
Survey of American literature .....	6
Survey of English literature .....	6
Practical Criticism (ENGL 215) .....	3
Literature for the High School (ENGL 385) .....	3
Advanced electives in literature .....	9
Total .....	36-37

<sup>1</sup>A revision not reflected in this statement was pending final approval at the time of publication.

**CURRICULA PREPARATORY TO TEACHING FOREIGN LANGUAGES**

The College of Liberal Arts and Sciences offers curricula for the preparation of teachers of French, German, Latin, Russian, and Spanish. Teacher education minors are also available in these languages and in Italian and Portuguese.

**GENERAL EDUCATION REQUIREMENTS**

See page 305.

**PROFESSIONAL EDUCATION REQUIREMENTS**

Introduction to Foreign Language Education (HUMAN 279) .....	3
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Foundations of American Education (EPS 201) .....	3
Parateaching <sup>1</sup> .....	2
Educational Psychology (EDPSY 211) .....	3
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Educational Practice in Secondary Education (ED PR 242) .....	8
Total .....	24

<sup>1</sup>The student is required to complete FR 270, GER 270, LAT 270, RUSS 270, or SPAN 270, depending on his or her major.

**CURRICULUM PREPARATORY TO THE TEACHING OF FRENCH**

**For the Degree of Bachelor of Arts in the Teaching of French**

A minimum of 120 hours is required for graduation.

**Departmental Distinction.** A student must have a minimum 4.5 cumulative grade-point average, including a *Satisfactory* in practice teaching; complete two additional advanced-level courses in French or the teaching minor; complete a senior thesis (FR 292), and provide two letters of recommendation as evidence of exceptional teaching. Consult the teacher education adviser for details.



**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the humanities 15-hour humanities requirement by the requirements of the major.

**PROFESSIONAL EDUCATION REQUIREMENTS**

24 hours in professional education courses. (See page 310.)

TEACHING AREA OF CONCENTRATION: FRENCH	HOURS
Elementary French (FR 101 and 102, or equivalent) .....	8
Intermediate French (FR 133 and 134, or equivalent) .....	8
French literature (FR 209 and 210, or equivalent) .....	6
Oral French (FR 205, 206, and 217 or equivalent) .....	10
French composition (FR 207 or equivalent) .....	3
French civilization (FR 335 and 336, or equivalent) .....	6
Teachers' course (FR 280 or equivalent) .....	4
This course will count as part of the professional education requirements for certification purposes. Normally taken during the student teaching semester	
French electives selected from among advanced-level courses in French civilization, language, and/or literature .....	5
Total <sup>1</sup> .....	50

NOTE: French Study Abroad (FR 299) is strongly recommended.

**TEACHER EDUCATION MINOR**

A student in this curriculum is required to complete a teacher education minor. See page 318 for a list of approved minors. See page 314 for requirements to be fulfilled by those planning to teach French in both elementary and secondary schools.

---

<sup>1</sup>The total of 50 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to FR 101 through 104 taken in secondary school.

---

**CURRICULUM PREPARATORY TO THE TEACHING OF GERMAN**

**For the Degree of Bachelor of Arts in the Teaching of German**

A minimum of 120 hours of credit is required for graduation.

**Departmental Distinction.** Students should consult their advisers by the second semester of the junior year for information pertaining to seminar honors work and honors awards in the department.

**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major.

**PROFESSIONAL EDUCATION REQUIREMENTS**

24 hours in professional education courses. (See page 310.)

TEACHING AREA OF CONCENTRATION: GERMAN	HOURS
Elementary German (GER 101 and 102, or equivalent) .....	8
Intermediate German (GER 103 and 104, or equivalent) .....	8
German conversation and writing (GER 211 and 212, or equivalent) .....	6
Introduction to German literature (GER 231 and 232, or equivalent) .....	6
Teachers' course (GER 280 or equivalent) .....	4
This course will count as part of the professional education requirements for certification purposes	
Advanced conversation, composition, and syntax (GER 301 or equivalent) .....	3
Advanced conversation (GER 302 or equivalent) .....	1
History of German civilization (GER 320 or equivalent) .....	4
Modern German Poetry (GER 330) or The German <i>NOVELLE</i> (GER 331) or German Drama (GER 332) or Literature and Culture of the German Democratic Republic (GER 335) .....	3
Structure of the German language (GER 365 or equivalent) .....	3
German elective .....	3
Total <sup>1</sup> .....	49

NOTE: German Study Abroad (GER 299) is strongly recommended

TEACHER EDUCATION MINOR

A student in this curriculum is required to complete a teacher education minor. See page 318 for a list of approved minors. See page 314 for requirements to be fulfilled by those planning to teach German in both elementary and secondary schools.

<sup>1</sup>The total of 49 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to GER 101-104 taken in secondary school.

CURRICULUM PREPARATORY TO THE TEACHING OF LATIN

For the Degree of Bachelor of Arts in the Teaching of Latin

A minimum of 120 hours of credit is required for graduation.

**Departmental Distinction.** The requirements for distinction in the teaching of Latin are the same as those for distinction in the classics.

GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major.

PROFESSIONAL EDUCATION REQUIREMENTS

24 hours in professional education courses. (See page 310.)

TEACHING AREA OF CONCENTRATION: LATIN	HOURS
Elementary Latin (LAT 101 and 102, or equivalent) .....	8
Intermediate Latin (LAT 103 and 104, or equivalent) .....	8
Latin composition (LAT 113 and 114, or equivalent) .....	4
Survey of Latin literature (LAT 201 and 202, or equivalent) .....	6
Teachers' course (LAT 280 or equivalent) .....	4
This course will count as part of the professional education requirements for certification purposes. Must be taken during the student teaching semester	
Readings from Latin literature (LAT 391 or equivalent) .....	6
Ancient history (HIST 181 and 182, or equivalent) .....	6
Classical archaeology (CLCIV 131 and 132, or equivalent) .....	6
Total <sup>1</sup> .....	48

TEACHER EDUCATION MINOR

A student in this curriculum is required to complete a teacher education minor. See page 318 for a list of approved minors. See page 314 for requirements to be fulfilled by those planning to teach Latin in both elementary and secondary schools.

<sup>1</sup>The total of 48 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to LAT 101-104 taken in secondary school.

CURRICULUM PREPARATORY TO THE TEACHING OF RUSSIAN

For the Degree of Bachelor of Arts in the Teaching of Russian

A minimum of 123 hours of credit is required for graduation.

**Departmental Distinction.** The requirements for graduation with distinction in the teaching of Russian are the same as for graduation with distinction in the Russian major.

GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major.

PROFESSIONAL EDUCATION REQUIREMENTS

24 hours in professional education courses. (See page 310.)

TEACHING AREA OF CONCENTRATION: RUSSIAN	HOURS
Courses in language and literature	
RUSS 101 and 102—First-Year Russian, or equivalent .....	8
RUSS 103 and 104—Second-Year Russian, or equivalent .....	8
RUSS 211 and 212—Russian Conversation, I and II, or RUSS 303 and 304—Advanced Reading and Conversation, I and II .....	6



RUSS 213 and 214—Russian Composition, I and II, or RUSS 313 and 314—Advanced Composition and Usage, I and II .....	6
RUSS 215 and 216—Introduction to Russian Literature, I and II .....	6
RUSS 308—Russian Phonetics and Pronunciation .....	3
RUSS 315—Nineteenth-Century Literature in Translation; or RUSS 115, 116, 225, or 317 .....	3
RUSS 280—Teachers' course, or equivalent .....	4
This course will count as part of the professional education requirements for certification purposes. Must be taken during the student teaching semester	
Total <sup>1</sup> .....	44
Courses in Russian history and civilization	
HIST 219—Survey of Russian History from Early Times to the Present; or HIST 320, 321, 326, 327, or 328 .....	3
RUSS 113—Russian Civilization through Literature, or RUSS 114—Soviet Society through Literature ...	3
Total .....	6

TEACHER EDUCATION MINOR

A student in this curriculum is required to complete a teacher education minor. See page 318 for a list of approved minors. See page 314 for requirements to be fulfilled by those planning to teach Russian in both elementary and secondary schools.

ELECTIVES

Recommended electives (at least 3 hours) include ARTHI 111, 112; C LIT 340, 368; MUSIC 130, 131; PHIL 101; SLAV 319; HIST 313, 314; courses in Russian and East European area studies (GEOG 353, SOC 350); advanced courses in the major or minor field.

<sup>1</sup>The total of 44 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to RUSS 101 through 104 taken in secondary school.

CURRICULUM PREPARATORY TO THE TEACHING OF SPANISH<sup>1</sup>

For the Degree of Bachelor of Arts in the Teaching of Spanish

A minimum of 123 hours of credit is required for graduation.

**Departmental Distinction.** To be eligible for departmental distinction, a student must have a minimum grade-point average of 4.0, display exceptional teaching ability, and complete an approved project or series of projects. Consult the Spanish teacher training adviser for details.

GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major.

PROFESSIONAL EDUCATION REQUIREMENTS

24 hours in professional education courses. (See page 310.)

TEACHING AREA OF CONCENTRATION: SPANISH	HOURS
Elementary Spanish (SPAN 101 and 102, or equivalent) .....	8
Intermediate Spanish (SPAN 103 and 104, or equivalent) .....	8
Practical review of Spanish (SPAN 210 or equivalent) .....	3
Oral Spanish (SPAN 220 or equivalent and 216 or 222) .....	5-6
Spanish composition (SPAN 214 or equivalent) .....	3
Readings in Hispanic literature (SPAN 200 or equivalent) .....	3
Spanish and Latin American civilization (SPAN 240 and one course in Spanish American civilization from departmental approved list) .....	6
Introduction to the Study of Hispanic Literatures I (SPAN 225) .....	3
Introduction to the Study of Hispanic Literatures II (SPAN 227) .....	3
Spanish Grammar for Communicative Language Teaching (SPAN 274) .....	3
Teacher's course (SPAN 276 or equivalent) .....	4
This course is normally taken during the student teaching semester	
(Spanish electives: one or two 200- or 300-level courses .....	3-6
Total <sup>2</sup> .....	52-56

<sup>1</sup>Statement reflects a revision that was pending final approval at the time of publication.  
<sup>2</sup>The total of 52-56 hours may be reduced by as much as 16 hours through prerequisite credit for work equivalent to SPAN 101 through 104 taken in secondary school.

**Foreign Study.** It is strongly recommended that future teachers of Spanish engage in one or more semesters of study in a Spanish-speaking country. A number of the curricular requirements listed above may be met through the Year Abroad Program or other approved programs; see page 246.

**Specialty for Teaching a Foreign Language in Both High School and Elementary School.** A student who wishes to prepare for teaching a foreign language at the elementary and secondary school levels should consult the certification officer at the Council on Teacher Education, 120 Education Building, for information concerning current state requirements and procedures.

**CURRICULUM PREPARATORY TO THE TEACHING OF MATHEMATICS**

**For the Degree of Bachelor of Science in the Teaching of Mathematics**

This curriculum offers training for teachers of high school mathematics. A minimum of 120 hours of credit is required for graduation. Students may not receive more than 5 semester hours with grades of C or below in the calculus sequence. Students must maintain 3.5 University of Illinois and cumulative grade-point averages *and* averages of 3.5 in mathematics courses beyond calculus.

**Departmental Distinction.** A subcommittee of the area committee shall be appointed each year to select candidates for graduation with distinction on the basis of the following criteria: (1) overall grade-point averages of at least 4.25 for distinction, 4.5 for high distinction, and 4.75 for highest distinction; (2) grade-point averages in mathematics and education courses of at least 4.4 for distinction, 4.6 for high distinction, and 4.8 for highest distinction; and (3) recommendations of the students' teaching supervisors and other evidence of the students' teaching work for candidates for high distinction and highest distinction.

**GENERAL EDUCATION REQUIREMENTS<sup>1</sup>**

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the mathematics requirement by the requirements of the major. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

<b>PROFESSIONAL EDUCATION REQUIREMENTS</b>	<b>HOURS</b>
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	1
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	1
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
C&I 239 or fifteen clock hours of mathematics tutoring in an approved mathematics tutorial program ..	0-2
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	23-28

<b>REQUIREMENTS OF THE MAJOR</b>	<b>HOURS</b>
Calculus and analytic geometry .....	10-11
Topics on Geometry (MATH 302) .....	3
Introduction to Abstract Algebra (MATH 317) .....	3
Linear algebra (MATH 225, 315, or 318) .....	2-3
Real analysis (MATH 344 or 347) .....	3
Probability-statistics (STAT 210/MATH 263, STAT 310/MATH 363, or STAT 351/MATH 361) .....	3-4
Computer science (CS 101, 105, or 121) .....	3-4
Students must also select at least three additional courses from the field lists below, including courses from at least two different lists (with the approval of the undergraduate advising office, topics courses such as MATH 351 may be counted in the field list most appropriate to the content of a particular offering of that course) .....	9
Geometry-topology: MATH 303, 323, 332	
Analysis: MATH 247, 285, 306, 341 or 346 or 348, 384	
Algebra: MATH 305, 313, 315, 319, 353, 383	
Probability-statistics: STAT 311, 320, 330	
Total .....	36-40



COMBINED SCIENCES AND LETTERS/EDUCATION PROGRAM FOR  
MATHEMATICS TEACHERS

For the Degree of Bachelor of Science in Liberal Arts and Sciences and in the Teaching of  
Mathematics

This program leads to the degree of Bachelor of Science, with a major in mathematics. A student must maintain a 4.0 (A = 5.0) grade-point average in mathematics and a 3.75 all-University grade-point average to remain in the program. All requirements for the sciences and letters curriculum must be met. (See page 280.) A total of 120 hours is required for graduation.

GENERAL EDUCATION REQUIREMENTS	HOURS
See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the mathematics requirement by the requirements of the major. Students must elect PHYCS 106-107 for physical science. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.	

PROFESSIONAL EDUCATION REQUIREMENTS	HOURS
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	1
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	1
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
C&I 209 or fifteen clock hours of mathematics tutoring in an approved program	
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Educational Practice in Secondary Education (ED PR 242) .....	5-8
Total .....	23-26

REQUIREMENTS OF THE MAJOR	HOURS
Calculus and analytic geometry .....	10-11
Topics on Geometry (MATH 302) .....	3
Intermediate Analysis (MATH 247) .....	3
Introduction to Abstract Algebra (MATH 317) .....	3
Linear algebra (MATH 315 or 318) .....	3
Real analysis (MATH 344 or 347) .....	3
Probability-statistics (STAT 310/MATH 361 or STAT 351/MATH 363) .....	3-4
Computer science (CS 101, 105, or 121) .....	3-4
Two additional courses chosen from: MATH 285, 303, 305, 306, 313, 314, 319, 323, 332, 341, 346, 348, 351, 353, 364, 369, 383, 384 .....	6
Total .....	37-40

REQUIREMENTS OF THE MINOR
Each candidate must complete either (a) a teaching minor in accountancy, biology, chemistry, computer science, economics, foreign language, physics, physical science, or social science, or (b) 10 hours of course work in a field related to mathematics and consisting of courses that make use of mathematical principles and techniques. Approval of the department undergraduate advising office is required for the related course sequence.

CURRICULUM PREPARATORY TO THE TEACHING OF PHYSICS

For the Degree of Bachelor of Science in the Teaching of Physics

The curriculum is designed to prepare students to teach high school physics with a second teaching field in either mathematics or chemistry. A minimum of 132 hours of credit is required for graduation. In addition, a student must have at least a 3.5 (A = 5.0) cumulative and University of Illinois grade-point average to remain in the curriculum. A student must also maintain at least a 3.0 average in all attempts at science and mathematics courses taken at the University of Illinois in order to remain in the curriculum.

Students must complete a general chemistry sequence, MATH 242 or MATH 245 (Calculus of several variables), and MATH 285 (Differential Equations and Orthogonal Functions) or its equivalent. In addition, the curriculum requires the completion of either the Teacher Education Minor in Chemistry or the Teacher Education Minor in Mathematics.

**Departmental Distinction.** Distinction is determined by a combination of grade-point average and achievement in student teaching. The student's practice teaching experience will be evaluated by the departmental honors adviser and the teaching supervisor. Distinction requires a 4.2 grade-point average; high distinction, 4.4; highest distinction, 4.6. Students desiring distinction should consult with the departmental honors adviser during the junior year.

### GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Students may need additional hours in humanities to complete the 15-hour minimum required for certification.

### PROFESSIONAL EDUCATION REQUIREMENTS

#### HOURS

Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Techniques of Teaching in the Secondary Schools (C&I 241) .....	5
Educational Practice in Secondary Education (ED PR 242) .....	8
Total .....	30

### REQUIREMENTS OF THE MAJOR

#### HOURS

General chemistry .....	8
Mathematics	
Calculus and analytic geometry .....	10-11
Differential Equations and Orthogonal Functions (MATH 285) .....	3
Total .....	13-14
Physics	
General physics (PHYCS 106, 107, and 108) .....	12
Atomic Physics and Quantum Theory (PHYCS 383) .....	3
Intermediate Electricity and Mechanics (300-level) (PHYCS 331) .....	5
Light (300-level) (PHYCS 371) .....	4
Electives in physics (200- and 300-level, excluding PHYCS 319) .....	8
Total .....	32
Total .....	53-54

### REQUIREMENTS OF A TEACHER EDUCATION MINOR

#### HOURS

A teacher education minor in chemistry (see page 321) or in mathematics (see page 320) .....	8-11
--	------

## CURRICULUM PREPARATORY TO THE TEACHING OF SOCIAL STUDIES

### For the Degree of Bachelor of Arts in the Teaching of Social Studies

A minimum of 120 hours is required for graduation. This curriculum prepares its graduates for teaching social studies in grades six through twelve. The choice of options will be determined in consultation with the faculty adviser for this curriculum.

**Departmental Distinction.** To be eligible for graduation with distinction, a student must have a grade-point average of 4.25 in the major field, which is history.

Students are encouraged to make the necessary arrangements for graduation with distinction through consultation with the major adviser during the spring semester of the junior year.

### GENERAL EDUCATION REQUIREMENTS

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major.

### PROFESSIONAL EDUCATION REQUIREMENTS

#### HOURS

Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3



Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Techniques of Teaching in the Secondary Schools (C&I 241) .....	3
Educational Practice in Secondary Education (ED PR 242) .....	8
Total .....	28

**REQUIREMENTS OF THE MAJOR AND MINOR HOURS**

**Option A**

History courses .....	18-20
Survey of non-American history .....	6-8
American history (advanced hours) .....	6
European or non-Western history (advanced hours) .....	6
One course chosen from four of the following five fields (anthropology, economics, geography, political science, sociology) with a concentration of 8 to 9 hours in two .....	22-24
Teacher education minor in an approved teaching field outside the social studies area .....	20-24
Total in Option A .....	60-68

**Option B**

History courses .....	18-20
Survey of non-American history .....	6-8
American history (advanced hours) .....	6
European or non-Western history (advanced hours) .....	6
Concentration in two social studies fields other than minor field .....	16-18
Minor within the social studies area (anthropology, economics, geography, political science, sociology) .....	20
Total in Option B .....	54-58

**CURRICULUM PREPARATORY TO THE TEACHING OF SPEECH**

**For the Degree of Bachelor of Arts in the Teaching of Speech**

This program is designed to give the teacher a foundation in the areas of public speaking, communication, and theatre arts. A minimum of 132 hours of credit is required for graduation.

**Departmental Distinction.** The requirements for distinction in the curriculum preparatory to the teaching of speech are the same as those for speech communication.

**GENERAL EDUCATION REQUIREMENTS**

See the description of the general education requirements on page 305. Note that students in this curriculum satisfy the 15-hour humanities requirement by the requirements of the major. Students must elect 9 hours in literature.

**PROFESSIONAL EDUCATION REQUIREMENTS HOURS**

Preliminary Field Experience in Secondary Teaching (C&I 209) .....	0
Introduction to the Teaching of Secondary School Subjects (C&I 101) .....	2
Field Experience in Secondary Teaching (C&I 219) .....	2
Secondary Education in the United States (C&I 240) .....	2
Field Experience in Secondary Education (C&I 229) .....	2
Microteaching: Practice in Teaching Techniques (C&I 239) .....	2
Exceptional Students in Secondary Schools (SP ED 218) .....	1
Educational Psychology (EDPSY 211) .....	3
Foundations of American Education (EPS 201) .....	3
Techniques of Teaching (C&I 241 or C&I/SPCOM 247) .....	3
Educational Practice in Secondary Education (ED PR 242) .....	8
Total .....	28

**REQUIREMENTS FOR THE MAJOR HOURS**

Principles of effective speaking, or advanced oral communication .....	3
Voice and articulation, or speech and hearing problems in the classroom .....	2-3
Group discussion and conference leadership .....	3
Public discussion and debate .....	2
Oral interpretation .....	3
Elements of stagecraft .....	4
Fundamentals of acting .....	3
Directing I .....	3
Principles of radio and television broadcasting .....	3
Electives chosen from one of the following areas (9 hours must be at the 200 level or above): .....	9-12
Oral interpretation	
Public discourse	
Interpersonal communication	
General (12 hours required)	
Total .....	35-39

**TEACHER EDUCATION MINOR**

A student in this curriculum is required to complete a teacher education minor. See page 318 for a list of the possible minors.

***Teacher Education Minors***

**ENGLISH AND SPEECH**

**Teacher Education Minor in English**

<b>REQUIRED COURSES</b>	<b>HOURS</b>
RHET 105 or 108 .....	4
Two courses in American literature (ENGL 255 and 256 are strongly recommended) .....	6
Two courses in English literature (ENGL 209 and 210 are strongly recommended) .....	6
ENGL 381—Theory and Practice of Written Composition, or RHET 133—Principles of Composition, or RHET 143—Intermediate Expository Writing (ENGL 381 is strongly recommended) .....	3
ENGL 302—Descriptive English Grammar .....	3
Electives in English or American literature (ENGL 215 is strongly recommended) .....	6
Total .....	28

**Teacher Education Minor in English as a Second Language<sup>1</sup>**

<b>REQUIRED COURSES</b>	<b>HOURS</b>
-------------------------	--------------

**Track 1:** for any undergraduate wishing to prepare to teach English overseas or in any context other than the public schools.

EIL/LING 388—English Phonology and Morphology for ESL teachers .....	3
EIL/LING 389—Theoretical Foundations of TESL Methodology .....	3
LING 200—Introduction to Language Science .....	3
LING 225—Elements of Psycholinguistics .....	3
EIL 302—Descriptive English Grammar for ESL teachers .....	3
Two courses from the following groups: A, B, or C; no more than one course may be taken in each group. Note that EIL 301(a) and EIL 301(b) must both be taken if a student elects Group B, and a student must still elect a course from either Group A or Group C .....	6-8
<i>Group A: Culture and Language:</i> LING/EIL 350—Introduction to Sociolinguistics (3 hours), <i>or</i> EIL 356—The Impact of Cultural Differences in TESL (3 hours).	
<i>Group B: Supervised Practicum Experience:</i> EIL 301(a)—Topics in Applied TESL/TEFL Theory: Methods and Materials (3 hours) <i>and</i> EIL 301(b)—Practicum (2 hours).	
<i>Group C: Language Pedagogy:</i> EIL 367—Communicative Approaches to Second and Foreign Language Teaching (3 hours), <i>or</i> EIL 360—Principles of Language Testing (3 hours)	
Total hours for Track 1 .....	21-23

**Track 2:** for those in another teacher education curriculum who want to prepare themselves to gain an ESL endorsement on their teacher's certificate related to their major field.

LING 200—Introduction to Language Science .....	3
EIL/LING 388—English Phonology and Morphology for ESL Teachers .....	3
EIL 302—Descriptive English Grammar for ESL Teachers .....	3
EIL/LING 389—Theoretical Foundations of TESL Methodology .....	3
EIL 360—Principles of Language Testing .....	3
EIL 301(a)—Topics in Applied TESL/TEFL Theory: Methods and Materials .....	3
EIL 301(e)—On-site Clinic Experience Grades One through Six <i>or</i> EIL 301(f) On-site Clinic Experience Grades Seven through Twelve .....	3
EIL 356—Impact of Cultural Differences in TESL .....	3
Total hours for Track 2: .....	24

<sup>1</sup>This statement reflects a revision of the teacher education minor in ESL which was pending final approval at the time of publication.

**Teacher Education Minor in Rhetoric**

Available only with a teacher education major in literature.

<b>REQUIRED COURSES</b>	<b>HOURS</b>
-------------------------	--------------

RHET 105 and a speech performance elective, or RHET 108 and a speech performance elective, or SPCOM 111 and 112 .....	6-7
RHET 133—Principles of Composition, or RHET 143—Intermediate Expository Writing .....	3
RHET 144—Introductory Narrative Writing .....	3
ENGL 381—Theory and Practice of Written Composition .....	3



ENGL 302—Descriptive English Grammar .....	3
Electives in rhetoric or related fields .....	6-7
Total .....	24-26

Teacher Education Minor in Speech

REQUIRED COURSES	HOURS
Principles of effective speaking .....	3
Advanced oral communication, or persuasion .....	3
Oral interpretation .....	3
Fundamentals of acting .....	3
Dramatics for teachers .....	3
Speech for teachers, or the teaching of speech .....	3
Voice and articulation .....	2
Discussion and group leadership, or interpersonal communication .....	3
Rhetoric (includes RHET 105 or 108) .....	6
Total .....	29

FOREIGN LANGUAGES

Teacher Education Minor in French

REQUIRED COURSES	HOURS
Elementary French (FR 101 and 102, or equivalent) .....	8
Intermediate French (FR 133 and 134, or equivalent) .....	8
Oral French (FR 205 and 206, or equivalent) .....	6
Total .....	22

Teacher Education Minor in German

REQUIRED COURSES	HOURS
Elementary German (GER 101-102) .....	8
Intermediate German (GER 103-104) .....	8
Conversation and Writing (GER 211-212) .....	6
Total .....	22

Teacher Education Minor in Italian

REQUIRED COURSES	HOURS
Elementary Italian (ITAL 101 and 102, or equivalent) .....	8
Intermediate Italian (ITAL 103 and 104, or equivalent) .....	8
Conversation I and II (ITAL 220 and 222) .....	6
Total .....	22

Teacher Education Minor in Latin

REQUIRED COURSES	HOURS
Elementary Latin (LAT 101 and 102, or equivalent) .....	8
Intermediate Latin (LAT 103 and 104, or equivalent) .....	8
Elementary Latin composition (LAT 113 and 114, or equivalent) .....	4
Survey of Latin literature (LAT 201 and 202, or equivalent) .....	6
Teachers' course (LAT 280) .....	4
Total .....	30 <sup>1</sup>

<sup>1</sup>The total of 30 hours may be reduced by as much as 16 hours through prerequisite credit for secondary school work equivalent to LAT 101 through 104. One semester of readings in Latin literature will be required in such cases.

Teacher Education Minor in Portuguese

REQUIRED COURSES	HOURS
Elementary Portuguese I and II (PORT 101 and 102) .....	8
Intermediate Portuguese (PORT 103 and 104) .....	8
Composition and Conversation I (PORT 210) .....	3
Studies in Brazilian Literature (PORT 310) .....	3
Total .....	22

Teacher Education Minor in Russian

REQUIRED COURSES	HOURS
RUSS 101 and 102—First-Year Russian, or equivalent .....	8
RUSS 103—Second-Year Russian I, or equivalent .....	4
RUSS 104—Second-Year Russian II .....	4
RUSS 211 and 212—Russian Conversation, I and II .....	6
Total .....	22

Teacher Education Minor in Spanish

REQUIRED COURSES	HOURS
Elementary Spanish (SPAN 101 and 102, or equivalent) .....	8
Intermediate Spanish (SPAN 103 and 104, or equivalent) .....	8
Practical review of Spanish (SPAN 210 or equivalent) .....	3
Oral Spanish (SPAN 220 or equivalent) .....	3
Spanish composition (SPAN 214 or equivalent) .....	3
Total .....	25

MATHEMATICS AND COMPUTER SCIENCE

Teacher Education Minor in Computer Science

REQUIRED COURSES	HOURS
CS 121—Introduction to Computer Science .....	4
CS 232—Computer Architecture II .....	3
Two of the following four courses: .....	6
CS 231—Computer Architecture I	
CS 257—Numerical Analysis	
CS 273—Introduction to the Theory of Computation	
CS 281—Introduction to Computer Hardware	
Two 300-level computer courses .....	6
Total .....	19 <sup>1</sup>

<sup>1</sup>Students will need 32 hours of computer science to be certified in this area.

Teacher Education Minor in Mathematics

For students in teacher education curricula other than mathematics who wish to be qualified to teach mathematics at the high school or middle school level.

REQUIREMENTS TO TEACH MATHEMATICS IN GRADES 9-12	HOURS
MATH 120 and 132, or equivalent .....	8
At least 3 hours of methods courses in the teaching of mathematics (C&I 101—section M for 2 hours and C&I 219 for 1 hour) .....	3
At least 14 hours of work chosen as follows: .....	14
Calculus of Several Variables (MATH 242)	
Topics on Geometry (MATH 302)	
At least 8 hours, including courses from at least two areas other than applied mathematics and geometry, to be chosen from the following list:	
Computer science (CS 101, 105, or equivalent)	
Linear algebra (MATH 125, 225, 315, 383)	
Modern algebra (MATH 313, 317, 353)	
Advanced Aspects of Euclidean Geometry (MATH 303)	
Applied mathematics (MATH 247, 285, 341, 344, 346)	
Probability-statistics (STAT 210/MATH 263, STAT 310/MATH 363)	
History of Calculus (MATH 306)	

REQUIREMENTS TO TEACH MATHEMATICS IN GRADES 6-8

Math methods <sup>1</sup> .....	3
At least 15 hours of work from at least four of the following areas .....	15
MATH 200, 201	
MATH 120, 132—Calculus	
MATH 313, 317, 353—Modern algebra	
MATH 302—Topics on Geometry	
CS 101, 105, or equivalent—Computer science	
STAT 100/MATH 161, STAT 210/MATH 263, STAT 310/MATH 363—Probability-statistics	
MATH 306—History of mathematics	



<sup>1</sup>The approved methods course will be revised; students should contact the certification officer in 120 Education Building for information about which course to use.

SCIENCE

Teacher Education Minor in Biology

Electives totaling 12 hours are to be chosen from the various departments in the School of Life Sciences, in consultation with the adviser. An attempt should be made to obtain background in each of the general areas in the School of Life Sciences to give the student minoring in the teaching of biological sciences as much breadth as possible as a prospective biology teacher.

REQUIRED COURSES	HOURS
Principles of biology (BIOL 110 and 111) .....	10
Genetics (BIOL 210) .....	4
Electives to be taken in the life science areas chosen in consultation with the biology education adviser .....	12
Total .....	26

Teacher Education Minor in Chemistry

REQUIRED COURSES	HOURS
General chemistry (CHEM 107-110, or CHEM 101, 102, 122 or 123) .....	10-11
Elementary organic chemistry including laboratory .....	5
Chemistry or other physical science courses .....	10-12
Total .....	25-28

Teacher Education Minor in Earth Science

REQUIRED COURSES	HOURS
Descriptive astronomy (ASTR 101 and 102) .....	8
Physical geography .....	4
General geology (GEOL 107 and 108) <sup>1</sup> .....	8
Regional Field Study (GEOL 115) .....	2
Mineralogy and Mineral Optics (GEOL 332) .....	4
Total .....	26

<sup>1</sup>Students who decide to follow the earth science teaching minor after first taking GEOL 101 or 111 or 100 and 110 should enroll in GEOL 108; students who decide to follow the minor after first taking GEOL 100 (without 110), 104, 105, or 143 should enroll in GEOL 107. The combination of GEOL 101 (or 111 or 100/110) and 102 will be accepted as a substitute for GEOL 107 and 108, but students should be aware these courses are not intended for science majors.

Teacher Education Minor in General Science

Additional hours in other sciences, such as astronomy, geology, and physical geography, are recommended for the student completing the minor in general science.

REQUIRED COURSES	HOURS
General physics (PHYCS 101 and 102) .....	10
Principles of biology (BIOL 110 and 111) .....	10
General chemistry .....	8
Total .....	28

Teacher Education Minor in Physical Science

A total of 24 semester hours in the field is required, with approximately half of the work in chemistry and the other half in physics. Additional work in other physical sciences, such as astronomy, geology, and physical geography, is recommended. This minor is intended primarily for students preparing to teach mathematics.

Teacher Education Minor in Physics

REQUIRED COURSES	HOURS
General physics and advanced physics .....	18
General chemistry .....	8
Total .....	26

SOCIAL STUDIES

Teacher Education Minor in History

For a minor in history, a student must complete at least 8 semester hours in American history, 8 semester hours in world history, and 9 semester hours of 200- or 300-level history electives, which should include attention to ethnic history and the history of women. The minimum total required for the minor is 24 hours.

Teacher Education Minor in Psychology

A minimum of 22 hours in psychology is required, with at least one course (a minimum of 3 hours) in each of the following areas: introductory psychology; statistics; personality—developmental, experimental, and social. It is strongly recommended that the additional hours include courses dealing with methods of research in psychology.

Teacher Education Minor in Social Studies

For a minor in social studies, a student must complete at least 8 hours of work in each of two of the following subjects: anthropology, economics, human geography, political science, sociology. The minimum total required for the minor is 24 hours from these five areas.

INTERDISCIPLINARY MINORS

Teacher Education Minor in Cinema Studies\*

Upon electing this minor, a student should consult with the academic adviser of the Unit for Cinema Studies for assignment to a faculty adviser. The sequence of courses counted toward completion of this minor must be approved in writing by the cinema studies adviser prior to the completion of the student’s sixth semester. See the cinema studies section in the *Timetable* each semester for a list of courses currently being offered. Contact the Unit for Cinema Studies for a more detailed description of these courses.

REQUIRED COURSES	HOURS
Introduction to Film (ENGL 104) .....	3
Cinematography, or equivalent <sup>1</sup> (ARTCI 180, 280, or 380) .....	3
Survey of World Cinema I: The Beginnings through the Coming of Sound (HUMAN 261) .....	3
Survey of World Cinema II: The Thirties to the Present (HUMAN 262), or Film Theory and Criticism (HUMAN 361) .....	3
Junior Seminar and Tutorial, or equivalent <sup>1</sup> (HUMAN 297) .....	3
Other cinema studies courses .....	9 <sup>2</sup>
Total .....	24

<sup>1</sup>The cinema studies adviser may approve a specific substitution for the cinematography and the junior seminar/tutorial requirements if the student is unable to secure these courses.

<sup>2</sup>This total must include courses in at least two different departments in the humanities. It must also include at least 3 hours at the 300 level. One humanities cinema studies course (besides HUMAN 297) offered directly by the school may be counted toward this requirement.

Teacher Education Minor in Women’s Studies\*

Students are required to take the two introductory women’s studies courses (WS 111 and 112) and a course in sex role socialization. Women’s studies electives totaling 15 hours are to be chosen in consultation with the Office of Women’s Studies and the student’s major adviser. The sequence of women’s studies courses elected should form a coordinated program of study.

\*This minor does not lead to an endorsement in an additional teaching field.



No more than 6 of the elective hours may be at the 100 level. At least four of the six elective courses should be taught either from a social sciences or a humanities perspective. Courses from the social sciences perspective must be chosen from courses in departments in the social sciences or the Department of Economics or Psychology, and courses from the humanities perspective must be chosen from courses in departments in the College of Liberal Arts and Sciences or in departments in the College of Fine and Applied Arts.

COURSE REQUIREMENTS	HOURS
American Women in Change: An Introduction (WS 111) .....	3
Introduction to Women's Studies in the Social Sciences (WS 112) .....	3
A course in sex role socialization .....	3
Electives to be chosen from the current approved list of women's studies electives .....	15
Total .....	24

*Joint Degree Programs*

**BACCALAUREATE-MASTER OF ACCOUNTING SCIENCE DEGREE PROGRAM**

The B.A./B.S.-M.A.S. program is designed to enable the qualified student to earn both a bachelor's degree in the College of Liberal Arts and Sciences and the Master of Accounting Science degree in five years rather than the normal six years. The program integrates an undergraduate education with a professional education without diluting the quality or purpose of either. Program objectives will be met primarily by the completion of courses during the student's fourth year that are simultaneously electives in the baccalaureate program and requirements for the M.A.S. degree. A student who is interested in the joint degree should contact a program adviser (in 270 Lincoln Hall) early in the initial year.

The program is open to all students in the College of Liberal Arts and Sciences who meet the requirements below. In most cases, participants in the B.A./B.S.-M.A.S. program will complete their undergraduate majors by the end of the third year. As a consequence, some students will have to plan their course work carefully to meet their undergraduate educational objectives and to participate in the program; this will be particularly true for undergraduates whose majors require extensive sequential course work.

Because the B.A./B.S.-M.A.S. program is based on careful course selection and program planning, an interested student should consult with a B.A./B.S.-M.A.S. adviser during the first year. The program's objectives and requirements will be explained so that the student, in consultation with his or her baccalaureate degree program adviser, may plan course work to meet both objectives.

A student who wishes to participate in the B.A./B.S.-M.A.S. program must make formal application by March 31 in the second semester of the junior year. To be eligible for consideration, the student must have at least a 4.25 cumulative grade-point average, with at least 96 hours of course work completed, and at least a score of 550 on the Graduate Management Admissions Test (GMAT).

**BACCALAUREATE-MASTER OF BUSINESS ADMINISTRATION DEGREE PROGRAM**

The B.A./B.S.-M.B.A. program is designed to enable the qualified student to earn both a bachelor's degree in the College of Liberal Arts and Sciences and the Master of Business Administration degree in five years rather than the normal six years. The program integrates an undergraduate education in a field such as English, political science, or economics with a professional business education without diluting the quality or purpose of either. Program objectives will be met primarily by the completion of courses during the student's fourth year that are simultaneously electives in the baccalaureate program and requirements for the M.B.A. degree. A student who is interested in the joint degree should contact the program adviser (in 270 Lincoln Hall) early in the first year.

The program is open to all students in the College of Liberal Arts and Sciences who meet the requirements below. In all cases, participants in the B.A./B.S.-M.B.A. program must complete their undergraduate majors by the end of the third year. As a consequence, some students will have to plan their course work carefully to meet their undergraduate educational objectives and to participate in the program; this will be particularly true for undergraduates whose majors require extensive sequential course work.

Since the B.A./B.S.-M.B.A. program is based on careful course selection and program planning, an interested student should consult with a B.A./B.S.-M.B.A. program adviser during the first year. The program's objectives and requirements will be explained so that the student, in consultation with his or her baccalaureate degree program adviser, may plan the course work to meet both objectives. A student who wishes to participate in the B.A./B.S.-M.B.A. program must make formal application by March 31 in the second semester of the junior year. To be eligible for consideration, the student must have at least a 4.4 cumulative grade-point average, with at least 96 hours of course work completed, and at least a score of 600 on the Graduate Management Admissions Test (GMAT).

## ***Preprofessional Health Programs***

### **PREPROFESSIONAL TRAINING**

Because of the very large number of students interested in the health and allied health professions and the limited number of spaces in professional schools, the competition for admission to professional programs is great. Students interested in the health and allied health professions are directed into degree programs in the college so that they can make progress toward meeting requirements for bachelor's degrees at the same time that they complete course requirements for admission to the desired health and allied health professions. By doing this, a student who is not successful in gaining admission to a professional program may complete a degree program without prolonging study beyond eight semesters.

### **ACADEMIC ADVISING**

Since students who are interested in the health professions are expected to enter degree programs of their choice, their academic advising is provided by the departmental offices of the curricula or majors that they have selected. Generally, students interested in dentistry, veterinary medicine, and often medicine are advised to elect the biology general option in life sciences as their major. Students interested in medical records administration, nutrition and medical dietetics, occupational therapy, pharmacy, physical therapy, and professional nursing are advised to elect the general curriculum.

### **PROFESSIONAL SCHOOL ADVISING**

Advising for professional schools and career advising for dentistry, allopathic medicine, osteopathic medicine, optometry, and podiatry may be obtained from the Health Professions Information Office, 901 West Illinois Street, Urbana, IL, 61801. The office serves as a resource center for information concerning careers in the health professions listed above, provides personal and individual career counseling and guidance for students who are interested in those professions, and coordinates the visits of deans and admissions officers to this campus to interview prospective applicants and to acquaint students with the unique educational features of their institutions.

The office provides standard faculty evaluation forms to students who are planning to apply to professional schools in the health professions listed above. A student may request letters of evaluation from faculty members at any time during his or her college career. The office will maintain the letters in a confidential file and will duplicate and forward them, unedited, to the professional schools designated by the student.

Academic advising and advising about application to the University of Illinois at Chicago for medical laboratory sciences, medical record administration, nursing, nutrition and medical dietetics, occupational therapy, physical therapy, and pharmacy is available at the General Curriculum Advising Office, 912 South Fifth Street, Champaign, IL 61820.

### **TRANSFER CREDIT FROM PROFESSIONAL SCHOOLS**

If a student has satisfied both college and major residence requirements, it is possible to transfer basic medical science credit satisfactorily completed at a fully accredited medical, dental, or veterinary medical school for courses acceptable to the major and to apply that credit to the requirements for the baccalaureate degree from the College of Liberal Arts and Sciences. The amount of transfer credit cannot exceed 30 semester hours, and duplication of courses completed on this campus will not be permitted. Credit will be counted only upon completion of one year's professional study.



A student planning to complete the baccalaureate degree requirements by attendance at a medical, dental, or veterinary medical school must obtain an evaluation of credit before attending that school. Because it is quite possible that less than the maximum amount of credit may be acceptable as transfer credit, it is essential that the student consult the admissions and records officer in the college office as early as possible.

If there is any question about whether a course meets the criteria for acceptability or about the amount of credit to be granted, the student will be responsible for providing the necessary information upon which the head of the appropriate department (or his or her designate) on this campus will make a recommendation to the college regarding the acceptance of credit. Final determination of the credit will be made by the dean of the College of Liberal Arts and Sciences or his or her designate.

The prior agreement regarding transfer credit from professional schools must be included in the student's major contract form.

## PROFESSIONAL HEALTH PROGRAM REQUIREMENTS

All of the professional and associated health programs listed below are offered only at the Health Sciences Center at the University of Illinois at Chicago. Upon completion of preprofessional requirements, students apply to these programs in open competition with students from the University of Illinois at Urbana-Champaign and elsewhere. Because of the high level of competition, not all applicants are admitted. Students who are interested in these programs should familiarize themselves with similar programs, offered by other colleges and universities in Illinois and in other states, to which they may wish to apply.

## PREPROFESSIONAL REQUIREMENTS FOR DENTISTRY

Preprofessional training for dentistry is basically a three-year program, although 60 to 70 percent of the students who are admitted to dental schools have bachelor's degrees. It is highly advisable, therefore, to complete the requirements for admission to dental school in conjunction with fulfilling requirements for a bachelor's degree.

It is essential for students to know the specific requirements for admission to each of the dental schools to which they apply. These requirements are listed in *Admission Requirements of the American Dental Schools*, published by the American Association of Dental Schools, 1625 Massachusetts Avenue, N.W., Washington, D.C. 20036.

Requirements of all U.S. and Canadian dental schools include: (1) All applicants take the Dental Admissions Test (DAT) as recommended and approved by the American Dental Association. For information concerning the test, write to the Division of Educational Measurements, American Dental Association, 211 East Chicago Avenue, Chicago, IL 60611. The application forms can also be obtained from the Health Professions Information Office, 901 West Illinois Street, Urbana, IL 61801. (2) All applicants must submit faculty letters of evaluation (a folder should be opened in the Health Professions Information Office). (3) An interview may be requested by the committee of admissions. The American Association of Dental Schools sponsors a centralized application service (AADSAS). Application request cards can be obtained from the Health Professions Information Office, 901 West Illinois Street, or by writing to AADSAS, 1625 Massachusetts Avenue N.W., Suite 101, Washington, D.C. 20036.

Courses should include:

Rhetoric: two semesters. (recommended are: SPCOM 111 and 112; or RHET 105 or 108, and RHET 133)

Mathematics (prerequisites for chemistry and physics): MATH 112 and 114

CHEM 101, 102; 131, and 134; and CHEM 122 or 336, or BIOCH 350

BIOL 110 and 111

PHYCS 101 and 102; or PHYCS 106, 107, and 108

General education sequences in humanities and social sciences

Electives (foreign language, MATH 120, social sciences, and humanities beyond the minimum requirements are strongly recommended)

## PREPROFESSIONAL REQUIREMENTS FOR MEDICINE

Although a few students are admitted to medical school after three years of preprofessional training, more than 95 percent of the students have bachelor's degrees. Therefore, students should pursue study in degree programs. There is no prescribed curriculum for premedical students. The majors in life sciences, chemistry, and biochemistry, and the curriculum in

chemical engineering, are especially suitable since requirements in these curricula overlap to some extent with medical school requirements. Any major in psychology, the humanities, social studies, or the fine arts is acceptable for medical school. Since students who are planning to apply to medical schools will need a number of science courses (even if they are majoring in nonscience areas), it is important that students elect mathematics during the first year since calculus is a prerequisite for some courses in chemistry, physics, and the life sciences.

Requirements of most American and Canadian medical schools include<sup>1</sup>: (1) All applicants must take the Medical College Admission Test (MCAT) as recommended and approved by the Association of American Medical Colleges. The MCAT must be taken no later than October of the year prior to enrollment. For information concerning the test, write to Medical Colleges Test, American Testing Program, Box 414, 2255 North Dubuque Road, Iowa City, IA 52243. The application forms can also be obtained from the Health Professions Information Office, University of Illinois at Urbana-Champaign, 901 West Illinois Street, Urbana, IL 61801. (2) All applicants must submit faculty letters of evaluation (folder should be opened in the Health Professions Information Office). (3) An interview may be requested by the committee on admissions.

The American Association of Medical Schools sponsors a centralized application service, the American Medical College Application Service (AMCAS). Applications are available from AMCAS, Section for Student Services, Suite 301, 1776 Massachusetts Avenue, N.W., Washington, D.C. 20036-1989. Application request cards or applications can be obtained from the Health Professions Information Office, 901 West Illinois Street, Urbana, IL 61801.

Students who anticipate careers in medicine are advised to obtain additional information from those medical schools in which they are interested. Specific admission requirements for individual medical schools are listed in *Medical School Admission Requirements*, published by the Association of American Medical Colleges, One Dupont Circle, N.W., Washington D.C. 20036.

---

<sup>1</sup>A few medical schools do not require the MCAT.

## PREPROFESSIONAL REQUIREMENTS FOR NURSING

The University offers a degree program leading to the Bachelor of Science in nursing for students with two or more years of selected liberal arts and sciences courses and for registered nurses who meet a specific set of requirements. Students are eligible for admission to the College of Nursing upon successful completion of 60 semester hours of liberal arts and sciences courses that meet graduation requirements.

The program is made up of two phases: two preprofessional years in the College of Liberal Arts and Sciences at Urbana-Champaign or at any other accredited college or university, and the professional phase administered by the College of Nursing at the Health Sciences Center of the University of Illinois at Chicago. (A baccalaureate degree program for registered nurses is also offered on the Urbana-Champaign campus by the College of Nursing.)

Two general education sequences are required for graduation from the College of Nursing: one in the natural sciences, and one in either the social sciences or the humanities. The two required sequences allow students to become more thoroughly acquainted with two selected disciplines.

A sequence in the natural sciences consists of four courses: two lower-division courses and one upper-division course in one area of choice (e.g., chemistry or biology) plus one course (lower- or upper-division) in a different area.

A sequence in the social sciences or humanities consists of three courses: two courses in one area of choice (e.g., psychology or sociology), one of which must be upper-division, and an additional course (either lower- or upper-division) in a different area of the same discipline (e.g., in the social sciences if the other two courses were also in the social sciences).

The nursing courses required for the R.N.-B.S.N. program include thirteen required core courses (49 semester hours), one long-term component course (3 semester hours) one selected focus course (5 semester hours) and electives (3 semester hours). For registered nurse students, 28 semester hours of the nursing requirements may be met through validation of previous learning using National League for Nursing (NLN) examinations which must be completed prior to enrollment in nursing courses.

Admission to the professional phase is on recommendation of the admissions committee of



the College of Nursing after completion of the following requirements with an overall grade-point average of 3.5 (A = 5.0) and a minimum grade of C in required courses:

English composition: RHET 105 or 108

General biology: 4 semester hours

Introductory statistics: 3 semester hours

Introduction to professional nursing: NF 210 (3 semester hours) To be taken in the sophomore year.

Other natural sciences, including organic chemistry and either anatomy and physiology or human biology: 16 semester hours

Social sciences, including optional sequence requirement: 9 semester hours

Humanities, including optional sequence requirement: 9 semester hours

Other liberal arts and sciences electives: to total 60 semester hours

For additional information about the programs in nursing, write to the University of Illinois at Chicago, Office of Student Services (M/C 802), College of Nursing, 845 South Damen Avenue, Chicago, IL 60612.

Information regarding the baccalaureate degree program for registered nurses may be obtained from the College of Nursing at 408 South Goodwin Avenue, MC-076, Urbana, IL 61801, (217) 333-2507.

## PREPROFESSIONAL REQUIREMENTS FOR PHARMACY

Preprofessional training for pharmacy is a two-year program. Minimum requirements for admission to the Doctor of Pharmacy degree program at the University of Illinois at Chicago are 61 semester hours, exclusive of physical education and military science, with at least a 3.5 (A = 5.0) grade-point average in the following:

English composition:

RHET 105 or 108 and SPCOM 101; SPCOM 111 and 112; or ESL 114, 115 and SPCOM 101 and an additional composition or speech performance course to bring total to 8 semester hours

Mathematics: MATH 120

Chemistry: CHEM 101, 102; 131, 134; and 336.

Biological sciences: BIOL 104, PLBIO 100, CSB 234, and MCBIO 100 (MCBIO 101 is strongly recommended)

Electives: 20 hours, including at least one course in each of the following five categories: social/behavioral sciences; economics, finance, or accounting; fine arts (including art, music, or theatre); physical sciences (including physics, geology, or astronomy); humanities (including history, philosophy, or foreign language)

**NOTE:** Applicants must have completed all course work in English composition, mathematics, and science before entering the College of Pharmacy, University of Illinois at Chicago, Health Sciences Center.

## PREPROFESSIONAL REQUIREMENTS FOR VETERINARY MEDICINE

Students wishing to complete the preprofessional requirements for veterinary medicine in the College of Liberal Arts and Sciences may do so within a variety of curricula. However, courses required are equivalent to those recommended for students majoring in the life sciences. See page 271.

Because of the competition for admission, students should plan to complete bachelor's degree programs. Recently there were approximately three qualified applicants for each space available in the entering class in veterinary medicine. The mean grade-point average of admitted students was slightly above 4.5 (A = 5.0).

Specific information about veterinary medicine, including admission requirements, may be found beginning on page 333.

## PREPROFESSIONAL REQUIREMENTS FOR MEDICAL LABORATORY SCIENCES

Minimum requirements for admission include 60 semester hours, exclusive of physical education and military science, with at least a 3.0 (A = 5.0) grade-point average in the following:

Composition: RHET 105/108 or SPCOM 111-112; and RHET 133 or 143

Mathematics: MATH 112 or equivalent (to fulfill prerequisite for chemistry)

Chemistry: 13 semester hours including: CHEM 101-102 (or 107-108 and 108-110), 131, and 134

Biological sciences: 13 semester hours including: MCBIO 100 and 101; or MICRO 200; PHYSL 103 (recommended electives: BIOL 100 or 101; BIOL 102 or 103; or BIOL 110, 111.)

Humanities: 6 semester hours

Social Sciences: 6 semester hours

Medical Terminology: one course (OFC 154 usually taken at Parkland College)

Electives: To complete a total of 60 semester hours (recommended are genetics, cell biology, anatomy, electronics, statistics, education, additional rhetoric)

**NOTE:** If a student must delay enrolling in CHEM 101 until the spring semester of the freshman year, attendance in summer school will be necessary to complete chemistry and biology in two years.

## **PREPROFESSIONAL REQUIREMENTS FOR HEALTH INFORMATION MANAGEMENT**

Minimum requirements for admission are 60 semester hours, exclusive of physical education and military science, with at least a 3.0 (A = 5.0) grade-point average in the following:

Composition: RHET 105/108 or SPCOM 111-112; and RHET 133 or 143

Biological science: PHYSL 103, CSB 234, and two additional courses: (recommended courses are: BIOL 100 or 101; BIOL 102 or 103; BIOL 110 and 111)

Mathematics: MATH 112 (prerequisite for statistics course).

Statistics: One course (e.g., SOC 185, PSYCH 235, ECON 171, MATH 161, or STAT 100)

Humanities: 6 semester hours

Social sciences: 6 semester hours

Electives: To complete minimum total of 60 semester hours

## **PREPROFESSIONAL REQUIREMENTS FOR NUTRITION AND MEDICAL DIETETICS**

Minimum requirements for admission are 60 semester hours, exclusive of physical education and military science, with at least a 3.5 (A = 5.0) grade-point average in the following:

Written and oral communication: RHET 105/108 and SPCOM 101; or SPCOM 111 and 112

Biological sciences: MICRO 100 (lab, MICRO 101 recommended); one additional course (recommended choices: PHYSL 103; BIOL 101; BIOL 103)

Chemistry: CHEM 101 and 102

Mathematics: MATH 112 (prerequisite for chemistry).

Statistics: One course: (e.g., SOC 185, PSYCH 235, ECON 171, MATH 161, or STAT 100)

Foods and nutrition: FN 120, FN 131

Psychology: PSYCH 100 or 105

Humanities: Two courses, preferably one in literature

Anthropology or sociology: Two courses (recommended are: ANTH 103; SOC 100)

Electives: To complete minimum total of 60 semester hours.

**NOTE:** If a student must delay enrolling in CHEM 101 until the spring semester of the freshman year, attendance in summer school will be necessary to complete chemistry and biology requirements in two years.

## **PREPROFESSIONAL REQUIREMENTS FOR OCCUPATIONAL THERAPY**

Preprofessional course work for occupational therapy generally is a two-year program. Minimum requirements for admission are 60 semester hours with at least a 3.5 (A = 5.0) grade-point average including the following courses:

Written and oral communication: RHET 105/108 and SPCOM 101; or SPCOM 111-112.

Human physiology: PHYSL 103

Human anatomy: CSB 234

Statistics: One course (e.g., SOC 185, PSYCH 235, ECON 171, MATH 161, STAT 100)

Mathematics: MATH 112 (prerequisite for statistics)

Social sciences: Three courses: SOC 100, and any two courses in a social science (excluding psychology)

Psychology: PSYCH 100, PSYCH 238, PSYCH 216 (HDFS 105 may be substituted), and one additional elective in psychology

Manual arts: Two courses in woodworking, sculpture, jewelry making, weaving, print making, or paper making (e.g., ART&D 150, ARTCR 160, ARTCR 170)

Medical terminology: One course (OFC 154 usually taken at Parkland College)

Humanities: 6 semester hours

Physical or biological science: Two courses (combination of 1 biology and 1 chemistry is recommended, but not required)

Electives: To complete the required 60 semester hours

**NOTE:** Current certification in cardiopulmonary resuscitation (CPR) is required upon entrance into the professional program.



## PREPROFESSIONAL REQUIREMENTS FOR PHYSICAL THERAPY

Preprofessional training for physical therapy is a two-year program. Minimum requirements for admission are 60 semester hours, exclusive of military service, with at least a 3.5 (A = 5.0) grade-point average in the following:

Composition: RHET 105/108 and RHET 133 or 143

Mathematics: MATH 112 and 114

Chemistry: CHEM 101 and 102

Biological sciences: BIOL 110 and 111

Psychology: PSYCH 100/105; and PSYCH 216 and 238 (HDFS 105 may replace PSYCH 216)

Physics: PHYCS 101 and 102

Kinesiology: two activity courses required

Humanities: Total of 6 semester hours

Electives to complete a total of 60 semester hours

(recommended are anthropology, human anatomy and physiology, health and safety studies, additional psychology, and sociology)

### NOTES:

- A current or up-to-date Red Cross First Aid and CPR card also will be required prior to enrollment.
- If a student must delay enrolling in CHEM 101 until the second semester of the freshman year, attendance in summer school will be necessary to complete chemistry and biology requirements in two years.

## Graduate School of Library and Information Science

410 David Kinley Hall, 1407 West Gregory Drive, Urbana, IL 61801

[501 East Daniel Street, Champaign, IL 61820 (beginning spring 1992)]

Graduate Study .....	330
Teacher Education Minor in Library Science .....	330

The Graduate School of Library and Information Science offers courses leading to the Master of Science and the Doctor of Philosophy degrees and the Certificate of Advanced Study. The school also offers some courses that may be taken by undergraduates as electives or as a minor in the College of Liberal Arts and Sciences or in the College of Education. These same courses also may be taken as electives by students in other colleges.

A master's degree is the entry-level credential for professional work in libraries and information centers. Generally, the most desirable preparation for such graduate study is an undergraduate major in a subject other than library and information science together with a related and appropriate minor. History, literature, the social sciences, the natural sciences, and foreign languages are all valuable. At the present time such subjects as chemistry, physics, mathematics, education, engineering, law, agriculture, and computer science are particularly needed and, when combined with professional training, can lead to a variety of challenging positions.

A person considering library and information science as a minor should meet with the dean of the Graduate School of Library and Information Science to discuss the type of preprofessional education best suited to the student's particular needs and interests.

### GRADUATE STUDY

For information about the graduate programs in library and information science, see the announcements of the Graduate School of Library and Information Science and the Graduate College, or call (217/333-3280) or write to the dean of the Graduate School of Library and Information Science.

### TEACHER EDUCATION MINOR IN LIBRARY SCIENCE

The Graduate School of Library and Information Science offers courses for advanced undergraduates in the College of Liberal Arts and Sciences or the College of Education who wish to qualify both as classroom teachers and as librarians in small elementary or secondary schools or as assistant librarians in large schools. Full professional training leading to the master's degree in library and information science is required of those who wish to prepare for positions in larger schools, for supervisory positions in the school library field, and for positions as media specialists.

Students interested in this program should contact the dean of the Graduate School of Library and Information Science.



# School of Social Work

1207 West Oregon Street, Urbana, IL 61801

Admission Requirements .....331

General Education Requirements .....331

Sample Undergraduate Program .....332

The School of Social Work offers undergraduate and graduate programs of study leading to the professional degrees of Bachelor of Social Work, Master of Social Work, and Doctor of Philosophy.

The Bachelor of Social Work (B.S.W.) program is for those individuals who wish to pursue a course of academic study and supervised field work that prepares them for beginning professional social work practice and graduate study in social work.

The B.S.W. program is accredited by the Council on Social Work Education. The focus of the curriculum is on teaching basic knowledge, principles, and techniques needed by the graduate to assume the beginning professional direct-service delivery role in a variety of social service settings, including child welfare, corrections, mental health, family services, health care, rehabilitation services, public assistance, and programs for the aged. Attention is also directed to the development of interpersonal competence as a significant part of the program of study. Finally, the professional study is based on the general education components of the University and study in relevant social, behavioral, and biological sciences. Professional positions are open to B.S.W. graduates in public and private social service agencies.

The beginning freshman interested in a career in social work is advised to enroll in the general curriculum of the College of Liberal Arts and Sciences and to meet with a social work adviser as early as possible to plan a program of study.

## ADMISSION REQUIREMENTS

A student is admitted to the program after completing 45 semester hours of undergraduate college-level work. Admission is based on the following: (1) a grade-point average of at least 3.75 (A = 5.0), (2) satisfactory progress in the required general education course work, (3) demonstrated volunteer and/or work experience in human service areas, and (4) a written statement of intent and interest. Applicants with grade-point averages lower than 3.75 or with unfinished general education courses will be considered if they demonstrate strong career motivation and aptitude. However, opportunities for admission are reduced if all criteria are not met.

A student admitted as a B.S.W. candidate is advised in the selection of a course of study that will enable the student to develop an appropriate knowledge and skill base for social work practice. The B.S.W. curriculum emphasizes the acquisition of knowledge and skills leading to improved communication, both oral and written; sharpened analytical ability; enhanced problem-solving ability; and increased social consciousness.

## GENERAL EDUCATION REQUIREMENTS

The Campus Senate, the faculty General Education Board, and the colleges and departments are working to implement enhanced general education requirements. Some changes in requirements are expected to take effect in fall 1991. Thus, new students should confirm their general education requirements by consulting college and departmental offices, handbooks, or advisers.

SAMPLE UNDERGRADUATE PROGRAM

For the Degree of Bachelor of Social Work

FIRST YEAR

FIRST SEMESTER	HOURS
RHET 105 or 108—Composition .....	4
SOC 100—Introduction to Sociology .....	3
PSYCH 100—Introduction to Psychology .....	3
Biological science (human biology)* .....	3
Literature and the arts* .....	3
Total .....	16

SECOND YEAR

FIRST SEMESTER	HOURS
SOC W 100—Contemporary Social Work .....	3
ECON 101—Introduction to Economics .....	4
Physical science elective* .....	3
Electives .....	6
Total .....	16

THIRD YEAR

FIRST SEMESTER	HOURS
SOC W 300—Methods of Social Work Intervention I .....	3
SOC W 310—Social Welfare Policies and Services I .....	3
Interdepartmental Course Concentration (ICC) course* .....	3
Electives .....	5
Total .....	14

FOURTH YEAR

FIRST SEMESTER	HOURS
SOC W 327—Research Methods in Social Work Practice .....	3
SOC W 351—Human Behavior and Social Environment I .....	3
Interdepartmental Course Concentration (ICC) course* .....	3
Electives .....	6
Total .....	15

FIRST YEAR

SECOND SEMESTER	HOURS
POL S 150—American Government: Organization and Powers .....	3
HDFS 105—Introduction to Human Development .....	3
Historical and philosophical perspectives* .....	3
Non-Western cultures and traditions* .....	3
Elective .....	3
Total .....	15

SECOND YEAR

SECOND SEMESTER	HOURS
PSYCH 238—Abnormal Psychology .....	3
Elementary statistics* .....	3
Science and society elective* .....	3
Electives .....	5
Total .....	14

THIRD YEAR

SECOND SEMESTER	HOURS
SOC W 301—Methods of Social Work Intervention II .....	3
SOC W 311—Social Welfare Policy and Services II .....	3
Social work field of practice* .....	3
Interdepartmental Course Concentration (ICC) course* .....	3
Elective .....	3
Total .....	15

FOURTH YEAR

SECOND SEMESTER	HOURS
SOC W 298—Practice Seminar .....	3
SOC W 299—Field Instruction .....	6
SOC W 299—Field Instruction .....	6
Total .....	15

\*Selected from an approved list of courses.



# College of Veterinary Medicine

2271G Veterinary Medicine Basic Sciences Building, 2001 South Lincoln Avenue,  
Urbana, IL 61801

Preprofessional Course Requirements .....	333
Admission .....	334
Costs .....	336
Honors Programs .....	336
Graduation Requirements .....	336
Curriculum .....	336

The College of Veterinary Medicine educates men and women in medical disciplines involving the animal kingdom. The four-year professional curriculum leads to the degree of Doctor of Veterinary Medicine. The program gives students a broad foundation in the biological and physical sciences and practical knowledge in the application of these principles to the prevention, control, and eradication of animal diseases. The college also strives to emphasize the profession's obligation to society.

Veterinary medicine offers an unlimited variety of intellectual and scientific challenges. Most veterinarians engage in specialized animal practice. Many others are involved in public health activities, which include controlling and eradicating diseases, assuring the wholesomeness of food products, developing and producing biological products and drugs, and enforcing health regulations for transported animals. Still other veterinarians engage in teaching and research.

Students receive the benefit of an instructional program constantly enriched by the latest advances in veterinary medicine. The first two years are devoted largely to basic veterinary medical subjects; the final two years consist chiefly of instruction in applied clinical subjects such as medicine, surgery, and obstetrics. Most of fourth-year instruction is in clinic and laboratory areas, enabling students to apply knowledge gained in classroom work to the diagnosis, prevention, treatment, suppression, and eradication of disease.

The college is affiliated with the Agricultural Experiment Station and the Cooperative Extension Service and is a component of the Graduate College. It cooperates with the Illinois Departments of Agriculture, Public Health, and Conservation and with the State Natural History Survey on various projects.

## PREPROFESSIONAL COURSE REQUIREMENTS

**For a student with a B.S. or B.A. degree from an accredited college or university at the time of admission:** The only specific course requirements are those in biological science, chemistry, and physics as listed below. The preprofessional program must be completed at an accredited college or university. The courses in biology, chemistry, and physics are to be equivalent in content to those recommended for students majoring in biological sciences. It is strongly recommended that the science courses be taken on a graded basis.

**Biological sciences:** Two semesters (8 semester hours) or the equivalent of college-level course work in biological sciences with appropriate laboratory experience. These courses should emphasize the cellular, molecular, and genetic aspects, as well as the structure and function, of living organisms.

**Chemistry:** Four semesters (16 semester hours) or the equivalent of college-level course work in chemistry, including courses in organic chemistry and biochemistry. Laboratory work and familiarity with quantitative techniques are important aspects of this experience. To be acceptable, the biochemistry course must be at least 3 semester hours or 4 quarter hours and should have organic chemistry as a prerequisite.

**Physics:** Two semesters (8 semester hours) or the equivalent of college-level course work in physics with appropriate laboratory experience. These courses should include mechanics, heat, light, sound, electricity, and magnetism.

**For a student without a bachelor's degree at the time of admission:** At least 40 semester hours of science courses including the biology, chemistry, and physics requirements listed above.

**English:** One semester (3 semester hours) or the equivalent of college-level course work in English composition, and an additional one semester (3 semester hours) of English composition and/or speech.

**Humanities and social sciences:** Four semesters (12 semester hours) or the equivalent of college-level course work in the humanities and/or social sciences.

**Electives:** Twelve semester hours of junior- and senior-level courses in addition to the requirements above.

Preprofessional course requirements can be completed at most collegiate institutions. Students wishing to complete preprofessional requirements on the Urbana-Champaign campus of the University of Illinois may do so within a variety of curricula in either the College of Agriculture or the College of Liberal Arts and Sciences. Information regarding admission requirements for preprofessional programs offered on the Urbana-Champaign campus may be obtained by writing to the Office of Admissions and Records, University of Illinois at Urbana-Champaign, 10 Henry Administration Building, 506 South Wright Street, Urbana, Illinois 61801.

The Admissions Committee of the College of Veterinary Medicine will consider an application only if the applicant presents a minimum cumulative grade-point average of 3.5 (A = 5.0) at the end of the fall term preceding the desired date of admission. The applicant must also complete the preprofessional course requirements by the date of desired admission and maintain a minimum cumulative grade-point average of 3.5 (A = 5.0).

## ADMISSION

### Data

Completion of the minimum academic requirements does not guarantee admission to the professional curriculum. Because of limited facilities and the amount of support available to the College of Veterinary Medicine, the number of students who enter the professional curriculum each year must be restricted. Recently, there have been approximately three qualified applicants for each place available in the entering class. The mean grade-point average of the applicants selected has been about 4.4 (A = 5.0), and the mean number of preprofessional hours completed has been near 120 semester hours. This level of competition is expected to continue. Most applicants who are admitted have a considerable amount of experience with and exposure to animals and the veterinary profession, as well as records of strong participation in community and extracurricular activities.

### Application Procedure

Application materials for the professional curriculum are available from the Office of Admissions and Records, University of Illinois at Urbana-Champaign, 10 Henry Administration Building, 506 South Wright Street, Urbana, Illinois 61801, between September 1 and December 1. No application materials will be mailed after November 15. (New students enter the College of Veterinary Medicine in the fall only.)

All items submitted by the applicant (application form, fee, self-evaluation form, courses to be completed form) must be received in the Office of Admissions and Records by 5:00 p.m. December 1. Letters of evaluation are also due December 1. All other required supporting credentials, such as transcripts and Veterinary College Admission Test (VCAT) and Graduate Record Examination (GRE) results, must be received by February 1 for the application to be complete and the applicant considered for admission. Final grades for the fall term prior to enrollment must be on the transcript submitted for the February 1 credentials deadline, or consideration will be terminated. The application must be accompanied by a nonrefundable application fee of \$25, which is used partially to cover the cost of processing the application for presentation to the Admissions Committee.

An optional early notification deadline is available only for out-of-state students who have completed 60 or more semester hours by the end of the summer preceding application. All components of the application must be received in the Office of Admissions and Records by November 1.

Requests for additional information should be directed to the Office of Admissions and Records by mail, by telephone at (217) 333-0302, or by visiting the office at 177 Henry Administration Building. The office is open from 8:30 a.m. to noon and from 1:00 to 4:30 p.m. Monday through Friday. Appointments are recommended.



## **I. SELECTION CRITERIA (SUBJECT TO CHANGE)**

Because of the size and quality of the applicant pool, only a few highly qualified applicants have been admitted with the minimum of 60 hours in recent years. Therefore, all students are urged to structure their programs to qualify for a bachelor's degree within the normal four-year period.

In addition to submitting official transcripts of all collegiate work attempted, applicants must also provide official scores from the Veterinary College Admission Test (VCAT) and the Graduate Record Examination (GRE) general test and biology subject test. These scores will be sent to the Office of Admissions and Records from the private organizations administering the examinations (VCAT: Psychological Corporation, 555 Academic Court, San Antonio, Texas 78204; GRE: Educational Testing Service, P.O. Box 6000, Princeton, New Jersey 08541-6000). The examinations are offered at various locations nationwide during the fall, winter, and spring each year. Information on arranging to take the examinations is available in the application packet for the College of Veterinary Medicine.

Letters of evaluation are required from three persons who can evaluate the applicant's experience and ability relating to professional and scientific study. Two letters should be from college instructors or academic advisers. A letter from someone who can attest to the applicant's interest in veterinary medicine is highly desirable. A student who is currently enrolled in graduate school must include with the application a letter from the student's graduate adviser delineating current status in graduate school and the likely completion date of the graduate program.

Applicants are expected to demonstrate potential for contribution to and advancement of the profession. An interview may be required by the committee as a means of supplementing information obtained from the materials submitted.

Preference is given to residents of Illinois. Nonresidents with superior qualifications may be admitted. A very limited number of highly qualified foreign students may also be admitted.

The professional program of the College of Veterinary Medicine is accessible to qualified persons, and such persons will not be denied admission on the basis of disability. A qualified person is one who meets the academic and technical standards requisite to admission and participation in the educational program of the college. During their course of study, students treat animal patients while under the supervision of veterinary faculty members. Such clinical duties may not be waived since they are an essential part of the educational program. The technical standards of the college (as well as the veterinary medical profession) require that the safety of both animal patients and veterinary students be protected. The student will not cause a health or safety hazard to the animal patients or to other persons.

## **II. POINT RANKING SYSTEM (SUBJECT TO CHANGE)**

Applicants are currently ranked on the basis of a 100-point scale, with the allocation of points distributed among the following criteria:

### **Objective Measures of Academic Performance**

Seventy points—from grade-point averages determined from official college transcripts and from Veterinary College Admission Test (VCAT) and/or Graduate Record Examination (GRE) results. The cumulative grade-point average, science grade-point average, and total number of graded science hours completed, in addition to the scores earned on the VCAT and GRE, will most likely be used to allocate these points. (If a standardized test is taken more than once, the highest of the two most recent test scores will be used. The VCAT and GRE scores must be for tests taken during the current or preceding year's application period.) A limit of 60 hours has been imposed in the graded science hours category.

### **Subjective Measures—Personal**

Thirty points—allocated by the Admissions Committee on the basis of information submitted with the application and letters of recommendation indicating the applicant's knowledge of, motivation toward, and experience with the veterinary profession; evidence of leadership, initiative, and responsibility; animal contact and experience; and extracurricular factors influencing personal growth.

### **Bonus Points**

As many as eight bonus points may be given to applicants for ancillary factors that have influenced academic performance; consistently heavy course loads; the quality of courses or course sequences; and significant improvement after a "poor start." Bonus points are recalculated each year for applicants who reapply.

COSTS

The estimated tuition and fees for a student enrolled in a full or partial academic program are shown on pages 48 and 59. Each entering first-year veterinary student must provide a microscope for his or her own classroom use before the semester begins. Minimum specifications for these microscopes are established by the college and will be provided to the student upon notification of admission. This represents a recoverable investment of \$850 or more.

HONORS PROGRAMS

For information about the Campus Honors Program and the Dean’s List, see pages 35 and 78.

Honors at Graduation

Honors are awarded to superior students in the professional curriculum. For graduation with honors, a student must have a grade-point average of not less than 4.35 (A = 5.0) in all courses completed in the College of Veterinary Medicine; for graduation with high honors, a grade-point average of not less than 4.75 is required.

GRADUATION REQUIREMENTS

A student who has fulfilled the general education course requirements, has passed all courses in the first two years of the veterinary medicine curriculum, and has a cumulative grade-point average of 3.0 (A = 5.0) or better in these courses is eligible for the degree of Bachelor of Science in veterinary medicine.

A student who has passed all courses prescribed in the four-year veterinary medicine curriculum and who has a cumulative grade-point average of 3.0 (A = 5.0) or better in these courses is eligible for the degree of Doctor of Veterinary Medicine.

CURRICULUM (SUBJECT TO CHANGE)

For the Degree of Doctor of Veterinary Medicine

FIRST YEAR<sup>1</sup>

FIRST SEMESTER	CREDIT HOURS	CLOCK HOURS
AN S 325—Principles of Animal Nutrition .....	3 .....	4
VB 300—Gross Anatomy I .....	4 .....	8
VB 301—Histology-Embryology I .....	4 .....	8
VB 310—Neurobiology .....	3 .....	5
VP 330—Veterinary Medical History, Ethics, and Orientation .....	1 .....	1
VP 332 <sup>2</sup> —Veterinary Immunology .....	2 .....	7
VP 337 <sup>2</sup> —Veterinary Virology .....	2 .....	7
Total .....	19 .....	33

FIRST YEAR

SECOND SEMESTER	CREDIT HOURS	CLOCK HOURS
VB 302—Gross Anatomy II .....	5 .....	6
VB 305—Histology-Embryology II .....	3 .....	5
VB 315—Physiology I .....	4 .....	7
VCM 378—Veterinary Clinical Orientation .....	1 .....	1
VP 331—Veterinary Bacteriology and Mycology .....	4 .....	7
Electives <sup>3</sup> .....	1-2 .....	variable
Total .....	17-19 .....	approximately 28

SECOND YEAR

FIRST SEMESTER	CREDIT HOURS	CLOCK HOURS
VB 316—Physiology II .....	4 .....	4
VB 317—Physiology/Pharmacology Laboratory .....	1 .....	3
VB 318—Pharmacology I .....	2 .....	2
VCM 372 <sup>2</sup> —Veterinary Jurisprudence .....	1 .....	2
VP 333—Veterinary Parasitology .....	5 .....	7
VP 334—General Pathology .....	4 .....	7
VP 350—Epidemiology .....	2 .....	2
Electives <sup>3</sup> .....	1-2 .....	variable
Total .....	19-20 .....	approximately 29



**SECOND YEAR**

<b>SECOND SEMESTER</b>	<b>CREDIT HOURS</b>	<b>CLOCK HOURS</b>
VB 319—Pharmacology II .....	3 .....	3 .....
VCM 330 <sup>2</sup> —Companion Animal Medicine I .....	2 .....	5 .....
VCM 331 <sup>2</sup> —Companion Animal Medicine II .....	3 .....	5 .....
VP 335—Special Pathology .....	4 .....	7 .....
VP 338—Veterinary Clinical Pathology .....	4 .....	4 .....
VP 341—Food Hygiene and Public Health .....	2 .....	2 .....
Electives <sup>3</sup> .....	1 .....	2 .....
Total .....	18-19 .....	23 .....

**THIRD YEAR**

<b>FIRST SEMESTER</b>	<b>CREDIT HOURS</b>	<b>CLOCK HOURS</b>
VCM 332 <sup>2</sup> —Companion Animal Medicine III .....	3 .....	5 .....
VCM 333 <sup>2</sup> —Companion Animal Medicine IV .....	2 .....	5 .....
VCM 343—Poultry Diseases .....	2 .....	2 .....
VCM 351—Introduction to Surgery .....	1 .....	2 .....
VCM 352—General Small Animal Surgery .....	1.5 .....	2.5 .....
VCM 353—General Large Animal Surgery .....	1.5 .....	2.5 .....
VCM 362—Clinical and Laboratory Practice .....	2 .....	10 .....
VCM 375—Theriogenology .....	4 .....	6 .....
VCM 376—Veterinary Anesthesiology and Fluid Therapy .....	2 .....	2 .....
Total .....	19 .....	32 .....

**THIRD YEAR**

<b>SECOND SEMESTER</b>	<b>CREDIT HOURS</b>	<b>CLOCK HOURS</b>
VB 320—Toxicology .....	2 .....	2 .....
VB 324 <sup>2</sup> —Large Animal Nutrition .....	2 .....	2 .....
AND/OR		
VB 326 <sup>2</sup> —Small Animal Nutrition .....	1 .....	1 .....
VCM 334—Food Animal Medicine .....	5 .....	5 .....
VCM 354—Small Animal Surgery .....	2.5 .....	6 .....
VCM 355—Large Animal Surgery .....	2.5 .....	6 .....
VCM 366—Clinical Laboratory Practice .....	2 .....	2 .....
VCM 367—Radiology and Radiobiology .....	3 .....	4 .....
Total .....	18-20 .....	26-28 .....

**FOURTH YEAR**

**UNIT I (Thirty Weeks)<sup>5</sup>**

VCM 369—Clinical and Laboratory Practice <sup>4</sup> .....	25 .....	40 .....
Electives <sup>3</sup> .....	4-7 .....	variable .....

**FOURTH YEAR**

**UNIT II (Nine Weeks)**

VCM 369—Clinical and Laboratory Practice <sup>4</sup> .....	5 .....	40 .....
Electives <sup>3</sup> .....	1-3 .....	variable .....
Total .....	30-40 .....	variable .....

<sup>1</sup>Only students who have been accepted for admission to the professional curriculum are eligible to begin the first year's work in the College of Veterinary Medicine.

<sup>2</sup>Duration of the course is one-half of a semester.

<sup>3</sup>A total of 153 credit hours is required for graduation. Elective courses (12 or 13 credit hours) from a list designated by the College of Veterinary Medicine must be selected to supplement required course credits (140 or 141 credit hours).

<sup>4</sup>Assignments outside of regularly scheduled clinic hours are made and must be adhered to by the students involved.

<sup>5</sup>Unit I consists of seven six-week sections; the student will enroll for five of the seven sections. The other twelve weeks may be used for vacation time, for a voluntary externship with a veterinary practitioner, for a research or teaching experience, or for any other use of the student's choice.

## **Appendix A: Academic Deans and Directors of the Colleges, Schools, and Institutes**

### **DEANS OF THE COLLEGES**

W. R. Gomes, Dean, College of Agriculture  
Michael J. Ellis, Dean, College of Applied Life Studies  
John D. Hogan, Dean, College of Commerce and Business Administration  
James W. Carey, Dean, College of Communications  
P. David Pearson, Dean, College of Education  
William R. Schowalter, Dean, College of Engineering  
Kathryn A. Martin, Dean, College of Fine and Applied Arts  
Judith S. Liebman, Dean, Graduate College  
Richard L. Schmalbeck, Dean, College of Law  
Larry R. Faulkner, Dean, College of Liberal Arts and Sciences  
Charles C. O'Morchoe, Director, University of Illinois College of Medicine  
at Urbana-Champaign  
Victor E. Valli, Dean, College of Veterinary Medicine

### **DEANS AND DIRECTORS OF THE SCHOOLS AND INSTITUTES**

R. Alan Forrester, Director, School of Architecture  
Theodore Zernich, Director, School of Art and Design  
Jiri Jonas, Director, School of Chemical Sciences  
Leigh S. Estabrook, Dean, Graduate School of Library and Information Science  
Sharon Y. Nickols, Director, School of Human Resources and Family Studies  
Jordan Konisky, Director, School of Life Sciences  
Don V. Moses, Director, School of Music  
Paula A. Meares, Dean, School of Social Work  
Henry L. Taylor, Director, Institute of Aviation  
Roger A. Minear, Director, Institute for Environmental Studies  
Walter H. Franke, Director, Institute of Labor and Industrial Relations

### **UNIVERSITY LIBRARIAN**

David F. Bishop, University Librarian



## Appendix B: Teaching Faculty by College and Department

The following list of teaching faculty at the University of Illinois at Urbana-Champaign is given by college, department, or academic unit. Professors, associate professors, assistant professors, instructors, lecturers, adjunct professors, teaching associates, and department affiliates are included. Visiting, research, and emeritus professors are not included.

### COLLEGE OF AGRICULTURE

#### Office of Agricultural Communications and Education

##### *Professors*

Evans, James F.

Malone, Violet M.

##### *Associate Professors*

Hays, Robert G.

Osborne, Edward W.

Russell, Earl B.

##### *Assistant Professors*

Law, Dale A.

Reisner, Ann E.

Walter, Gerald L.

##### *Lecturer*

Barnard, Roger L.

Siebrecht, Robert M.

#### Department of Agricultural Economics

##### *Professors*

Barry, Peter J.

Bock, C. Allen

Braden, John B.

Burdge, Rabel J.

Chicoine, David L.

Erickson, Duane E.

Fettig, Lyle P.

Frey, Thomas L.

Garcia, Philip

Good, Darrel L.

Grossman, Margaret R.

Guither, Harold D.

Hill, Lowell D.

Leuthold, Raymond M.

Lins, David A.

Roush, James R.

Schmidt, Stephen C.

Scott, John T.

Seitz, Wesley D.

Sofranko, Andrew J.

Sonka, Steven T.

Spitze, Robert G.F.

van Es, John C.

##### *Associate Professors*

Allen, Joyce E.

Hauser, Robert J.

Johnson, Sam H.

Thompson, Sarahelen R.

Wagner, Melvin M.

##### *Assistant Professors*

Bullock, David S.

Crihfield, John B.

Eales, James S.

Farnsworth, Richard L.

Hornbaker, Robert H.

Mazzocco, Michael A.

Nelson, Charles H.

Nelson, Gerald C.

Onal, Hayri

Purnell, David R.

Sherrick, Bruce

Unnevehr, Laurian J.

#### Department of Agricultural Engineering

##### *Professors*

Bode, Loren E.

Christianson, Leslie L.

Day, Donald L.

Goering, Carroll E.

Hummel, John W.

Mitchell, J. Kent

Muehling, Arthur J.

Paulsen, Marvin R.

Pershing, Roscoe L.

Rodda, Errol D.

Siemens, John C.

##### *Associate Professors*

Buriak, Philip

Coddington, Richard C.

Eckhoff, Steven R.

Peterson, William H.

##### *Assistant Professors*

Aherin, Robert A.

Buck, Nelson L.

Ewing, Lloyd K.

Hirschi, Michael C.

Konyha, Kenneth D.

Litchfield, J. Bruce

Reid, John F.

Riskowski, Gerald L.

#### Department of Agronomy

##### *Professors*

Banwart, Wayne L.

Bernard, Richard L.

Boast, Charles W.

Carmer, Samuel G.

Courson, Roger L.

Dudley, John W.

Graffis, Don W.

Harper, James E.

Hassett, John J.

Heichel, Gary H.

Hesketh, John D.

Hinesly, Thomas D.

Hoeft, Robert G.

Holt, Donald A.

Hymowitz, Theodore

Jones, Robert L.

Kapusta, George

Knake, Ellery L.

Lambert, Robert J.

Laughnan, John R.

McGlamery, Marshal D.

Miller, Darrell A.

Nicholaides, John, III

Nickell, Cecil D.

Ogren, William L.

Ort, Donald R.

Peck, Theodore R.

Plewa, Michael J.

Portis, Archie R., Jr.

Rinne, Robert W.

Sief, Robert D.

Steffensen, Dale M.

Stoller, Edward W.

Wax, Lloyd M.

Widholm, Jack M.

##### *Associate Professors*

Below, Fred E.

Briskin, Donald P.

Cole, Michael A.

Darmody, Robert G.

David, Mark B.

Hepburn, Angus G.

Huck, Morris G.

Kaiser, Clarence J.

Mulvaney, Richard L.

Nafziger, Emerson D.

Nelson, Randall L.

Olson, Kenneth R.

Patterson, Earl B.

Pepper, Gary E.

Stucki, Joseph W.

Vodkin, Lila O.

White, Donald G.

Wilkinson, Hank T.

##### *Assistant Professors*

Bicki, Thomas J.

Bullock, Donald G.

Ellsworth, Timothy R.

Hollinger, Steven E.

Kolb, Frederic L.  
 Kriz, Alan L.  
 Liebl, Rex A.  
 Rayburn, A. Lane  
 Rocheford, Torbert R.  
 Roy, William R.  
 Simmons, William F.  
 Teyker, Robert A.  
 Vanden Heuvel, Rich

#### **Department of Animal Sciences**

##### *Professors*

Bahr, Janice M.  
 Baker, David H.  
 Berger, Larry L.  
 Champion, Dennis R.  
 Carr, Tom R.  
 Clark, Jimmy H.  
 Easter, Robert A.  
 Fahey, George C., Jr.  
 Gianola, Daniel  
 Grossman, Michael  
 Harrison, Paul C.  
 Hollis, Gilbert R.  
 Hutjens, Michael F.  
 Kelley, Keith W.  
 Lodge, J. Robert  
 Mackie, Roderick I.  
 Mistry, Sorab P.  
 Ricketts, Gary E.  
 Robinson, James L.  
 Schook, Lawrence B.  
 Spahr, Sidney L.

##### *Associate Professors*

Faulkner, Dan B.  
 Gonyou, Harold W.  
 Graves, Charles N.  
 Groenveld, Eildert  
 Hurley, Walter L.  
 Jaster, Edwin, H.  
 Kesler, Darrel J.  
 Lawrence, Laurie M.  
 Lewin, Harris A.  
 McKeith, Floyd K.  
 Merchen, Neal R.  
 Murphy, Michael R.  
 Novakofski, Jan E.  
 Parrett, Douglas F.  
 Parsons, Carl M.  
 Shanks, Roger D.  
 Thomas, David L.  
 Thompson, Leif H.  
*Assistant Professors*  
 Dill, Dewayne E.  
 Drackley, James K.  
 Fernando, Rohan L.  
 Kline, Kevin H.  
 Koelkebeck, Kenneth W.  
 McLaren, David G.  
 Odle, Jack

Wheeler, Matthew B.  
 White, Bryan A.

#### **Department of Food Science**

##### *Professors*

Cheryan, Munir  
 Erdman, John W.  
 Johnston, Patricia V.  
 Martin, Scott E.  
 Nishida, Toshiro  
 Perkins, Edward G.  
 Siedler, Arthur J.  
 Visek, Willard J.  
 Wei, Lun-Shin  
 Witter, Lloyd D.  
*Associate Professors*  
 Argoudelis, Christos J.  
 Artz, William  
 Baianu, Ion  
 Blaschek, Hans P.  
 Villota, Ricardo  
*Assistant Professors*  
 Berber-Jimenez, Dolores  
 Dunn, Larson  
 Jimenez-Flores, Rafael  
 McCord, Jeffrey D.

#### **Department of Forestry**

##### *Professors*

Anderson, John W.  
 Chow, Poo  
 Dawson, Jeffrey O.  
 Rolfe, Gary L.  
*Associate Professors*  
 Appleby, James E.  
 Brown, Sandra L.  
 David, Mark B.  
 Gertner, George Z.  
 Mendoza, Guillermo A.

##### *Assistant Professors*

Harry, Dave E.  
 Iverson, Louis R.  
 Marty, Timothy D.  
 Pugel, Anton D.

##### *Lecturers*

Edgington, John E.  
 Jacob, Thomas J.

#### **Department of Horticulture**

##### *Professors*

Carbonneau, Marvin C.  
 Courter, John W.  
 Dickinson, David B.  
 Endress, Anton G.  
 George, William L.  
 Gerber, John M.  
 Giles, Floyd A.  
 Meyer, Martin M., Jr.  
 Nelson, William R. Jr.  
 Rebeiz, Constantin A.  
 Skirvin, Robert M.  
 Splittstoesser, Walter E.

Spomer, L. Arthur  
 Williams, David J.  
*Associate Professors*  
 Fermanian, Thomas W.  
 Juvik, John A.  
 Kling, Gary J.  
 Korban, Schuyler S.  
 Smith, Mary Ann L.  
 Swiader, John M.  
 Wehner, David J.  
*Assistant Professors*  
 Kerbel, Eduardo L.  
 Knight, Sharon L.  
 Masiunas, John B.

##### *Lecturers*

Cowen, Robin K.  
 Noland, Dianne A.

#### **Department of Plant Pathology**

##### *Professors*

Crane, J. Leland  
 D'Arcy, Cleora J.  
 Farrand, Stephen K.  
 Ford, Richard E.  
 Gray, Lynn E.  
 Irwin, Michael E.  
 Lim, Sung M.  
 Neely, R. Dan  
 Shaw, Paul D.  
 Shurtleff, Malcolm C.  
 Sinclair, James B.  
*Associate Professors*  
 Edwards, Dale I.  
 Glawe, Dean A.  
 Kirby, H. Walter  
 Malek, Richard B.  
 Noel, Gregory R.  
 Pataky, Jerald K.  
 Paxton, Jack D.

Pedersen, Wayne L.  
 Ries, Stephen M.

White, Donald G.  
 Wilkinson, Henry T.

##### *Assistant Professors*

Domier, Leslie L.  
 Eastburn, Darren M.  
 Eastman, Catherine E.  
 Hewings, Adrianna

### **SCHOOL OF HUMAN RESOURCES AND FAMILY STUDIES**

#### **Division of Consumer Sciences**

##### *Professors*

Magrabi, Frances M.  
 Nickols, Sharon Y.



*Associate Professors*

Beller, Andrea H.  
 Buckley, Hilda M.  
 Cude, Brenda J.  
 Douglas, Sara U.  
 Fisher, Nancy J.  
 Fitzsimmons, Vicki R.  
 Hafstrom, Jeanne L.  
 Morganosky, Michelle  
 Raheel, Mastura  
 Sohn, Marjorie A.  
*Assistant Professors*  
 Krein, Sheila F.  
 Paynter, MaryAnn  
 Potthoff, Joy K.  
 Wysocki, Joseph L.  
*Teaching Associates*  
 Sozen, Joan B.  
 Wysocki, Carolyn B.  
 ZuHone, Laura M.

**Division of Foods and Nutrition***Professors*

Klein, Barbara P.  
 Layman, Donald K.  
*Associate Professors*  
 Logomarsino, John V.  
 Reber, Robert J.

*Assistant Professors*

Brewer, M. Susan  
 Hentges, Dawn L.  
 Pankau, Joseph W.  
 Potter, Susan M.  
 Schmidt, Shelly R.  
 Singletary, Keith W.  
 Weigel, M. Margaret

*Lecturers*

Brown, Peter D.  
 Reutter, Elizabeth A.

**Division of Human Development and Family Studies***Professors*

Birch, Leann L.  
 DeLoache, Judy S.  
 O'Reilly, Lawrence B.  
 Salamon, Sonya B.  
*Associate Professors*  
 Bagby, Beatrice H.  
 Hughes, Robert, Jr.  
 Larson, Reed W.  
 Peterson, B. Jean  
*Assistant Professors*  
 Ebata, Aaron  
 Kramer, Laurie F.  
 McBride, Brent A.  
 Perry-Jenkins, Maureen A.  
 Todd, Christine M.

*Teaching Associates*

Billman, M. Jane  
 Cates, Laurie A.  
 Lytle, Anne W.  
 Medlyn, Debra S.

**COLLEGE OF APPLIED LIFE STUDIES****Department of Health and Safety Studies***Professors*

Armstrong, R.W.  
 Imrey, Peter B.  
 Mortimer, Rudolf G.  
 O'Reilly, Lawrence B.  
 O'Rourke, Thomas W.  
 Rich, Robert F.  
 Sprague, Robert L.  
 Stone, Donald B.  
 Swartz, Harold M.

*Associate Professors*

Buchanan, Robert J.  
 Flood, Ann Barry  
 Rubinson, Lurna G.  
 Young, Charles R.  
*Assistant Professors*  
 Goldsteen, Raymond L.  
 Hungerford, Laura L.  
 Kitron, Uriel D.

Main, David M.  
 Pankau, Joseph W.  
 Reis, Janet S.  
 Van Winkle, Nancy S.  
 Weigel, Ronald M.

*Lecturers*

O'Reilly, Shirley M.  
 O'Shaughnessey, Mary E.

**Department of Kinesiology***Professors*

Adrian, Marlene J.  
 Bloomfield, Daniel K.  
 Boileau, Richard A.  
 Ellis, Michael J.  
 Greendorfer, Susan L.  
 Loy, John W., Jr.  
 Martens, Rainer  
 Newell, Karl M.  
 Roberts, Glyn C.  
 Sprague, Robert  
 Williams, Benjamin  
 Wright, Rollin G.  
*Associate Professors*  
 Carlton, Les G.  
 Chick, Garry E.  
 Larson, Reed  
 McAuley, Edward  
 Misner, James E., Jr.  
 Moeinzadeh, Manssour

Slaughter, Mary  
 Trekell, Marianna  
 Waldrop, Tony G.

*Assistant Professors*

Arnold, Donald E.  
 Bell, Gerald W.  
 Deutsch, Helga M.  
 Iwamoto, Gary

Ji, Li Li

Kahrs, Karol

Katz, Abram

Riccio, Gary E.

Rich, Nancy

Rovegno, Inez

Slowikowski, Synthia

Soboroff, Stephen

Stillman, Rachel J.

*Lecturers*

Hodges, Pamela

*Teaching Associates*

McGreal, Kathy M.

Pollok, Ann L.

**Department of Leisure Studies***Professors*

Bannon, Joseph J.  
 Burdge, Rabel J.  
 Kelly, John R.  
 Roberts, Glyn C.

*Associate Professors*

Brademas, D. James  
 Chick, Garry E.  
 Espeseth, Robert D.  
 McKinney, William R.  
 Morris, Lynn Barnett

*Assistant Professors*

Burnam, Jerry D.  
 Valerius, Laura  
 Voelkl, Judi  
 Wicks, Bruce  
*Lecturers*  
 Klitzing, Sandra  
 Phelan, C. Michael

**Division of Rehabilitation-Education Services***Professors*

Adrian, Marlene J.  
 Henderson, Robert A.  
 Hill, Kennedy T.  
 Leung, Paul  
 Rusch, Frank R.  
 Sprague, Robert L.

*Associate Professors*

Kaczowski, Henry R.  
 Moeinzadeh, Manssour  
 Schiro-Geist, Chrisann  
 Trimble, John

*Assistant Professors*  
 Armstrong, M. Jocelyn  
 Bell, Gerald W.  
 Garske, Gregory  
 Hedrick, Bradley N.  
 Macomber, Janet  
 Martin, Bonnie  
 Strauss, Mark G.  
 Track, John S.  
 Weaver, Sarah

## **INSTITUTE OF AVIATION**

*Professors*  
 Hulin, Charles L.  
 Koonce, Jefferson M.  
 Moray, Neville P.  
 Ormsbee, Allen L.  
 Taylor, Henry L.  
 Wickens, Christopher  
*Associate Professors*  
 Garrelts, Weldon E.  
 Kramer, Arthur F.  
*Assistant Professors*  
 Lintern, Gavan  
 Stokes, Alan F.  
*Instructors*  
 Craig, James Jr.  
 Henne, Bertrand W.  
 Ruelle, Robert  
*Professional Aviation  
Education Specialists*  
 Emanuel, Tom W., Jr.  
 Geibel, William D.  
 Harshbarger, Terry L.  
 Ladage, Terry  
 Weinberg, Ricky A.  
*Associate Aviation Education  
Specialists*  
 Eizinger, Brad P.  
 Lendrum, Lester M.  
 Owen, Stephen F.  
 Van Proyen, Paul D.  
*Assistant Aviation Education  
Specialists*  
 Davis, Thomas, Jr.  
 Kaiser, Robert H.  
 Marganski, Adam A.  
 Petersen, David H.  
 Saccone, Glenn S.  
 Tshopp, Joanne M.  
 Ziegler, Charles F., Jr.

## **COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION**

*Department of  
Accountancy  
Professors*  
 Beck, Paul  
 Bull, Ivan  
 Dietrich, J. Richard  
 Holzer, H. Peter  
 Johnson, Orace E.  
 Kwon, Young  
 Neumann, Frederick L.  
 Schoenfeld, Hanns-Martin  
 Solomon, Ira  
 Tomassini, Lawrence  
 Willis, Eugene  
 Zimmerman, Vernon K.  
*Associate Professors*  
 Berry, Maureen H.  
 Brown, Clifton E.  
 Chandler, John S.  
 Molloy, Karen  
 Jamison, Robert W.  
 Kleinmuntz, Don  
 Silhan, Peter  
 Ziebart, David  
 Ziegler, Richard E.  
*Assistant Professors*  
 Desmond, Nancy A.  
 Dilla, William N.  
 Finger, Catherine  
 Jung, Woon O.  
 O'Leary, Timothy  
 Omer, Thomas C.  
 Rao, Gita  
 Shelley, Marjorie  
 Sougiannis, Theodore  
 Stone, Dan  
 Teets, Walter  
*Lecturers*  
 Feller, Anita  
 Goodwin, Ralph  
 Shanks, Wendy

### **Department of Business Administration**

*Professors*  
 Blair, Charles  
 Engelbrecht-Wiggans,  
 Richard  
 Evans, Richard V.  
 Gardner, David M.  
 Hill, Richard M.  
 Hinomoto, Hirohide  
 Huff, Anne S.  
 Kindt, John W.  
 Lansing, Paul

Murnighan, J. Keith  
 Oldham, Greg R.  
 Roberts, Donald M.  
 Rowland, Kendrith M., Jr.  
 Sudman, Seymour  
 Thomas, Howard  
 Whetten, David A.  
 Winter, Frederick  
*Associate Professors*  
 Black, Robert L., Jr.  
 Cohen, Susan  
 Duhaime, Irene  
 Hennart, Jean-Francois  
 Leblebici, Huseyin  
 Monahan, George  
 Porac, Joseph F.  
 Ritz, Zvi  
 Roszkowski, Mark  
 Shaw, Michael  
 Smunt, Timothy  
 Sudharshan, Devanathan  
*Assistant Professors*  
 Basu, Amiya K.  
 Buchanan, Lauranne  
 Chhajed, Dilip  
 Coupey, Eloise  
 Farjoun, Mashe  
 Kulik, Carol  
 Leatherwood, Marya  
 Mahoney, Joseph  
 Raman, Narayan  
 Simmons, Carolyn J.  
 Tang, Ming-Je  
 Viswanathan, Madhu  
 Yu, Joseph

### **Department of Economics**

*Professors*  
 Alston, Lee  
 Arnould, Richard J.  
 Attack, Jeremy  
 Baer, Werner  
 Blau, Francine  
 Brueckner, Jan  
 Ferber, Marianne  
 Giertz, J. Fred  
 Gillespie, Robert W.  
 Gottheil, Fred  
 Grinols, Earl L.  
 Hartman, Paul  
 Heins, A. James  
 Hendricks, Wallace  
 Kahn, Charles  
 Kahn, Lawrence  
 Koenker, Roger  
 Leuthold, Jane H.  
 McMahon, Walter W.  
 Neal, Larry  
 Newbold, Paul  
 Orr, Daniel  
 Rashid, Salim



Resek, Robert W.  
 Schran, Peter  
 Shafer, Wayne  
 Shupp, Franklin R.  
 Spiller, Pablo  
 Sprengle, Case  
 Taira, Koji  
 Ulen, Thomas  
 Wells, Paul  
 Yancey, Thomas  
 Yannelis, Nicholas C.  
*Associate Professors*  
 Arvan, Lanny  
 Bera, Anil  
 Coes, Donald V.  
 De Brock, Lawrence  
 Esfahani, Hadi  
 Husby, Ralph D.  
 Kolstad, Charles  
 Steinkamp, Stanley  
 Taub, Bart  
 Williamson, H.F.  
*Assistant Professors*  
 Chakravorti, Bhaskar  
 Conley, John  
 Feldman, Mark  
 Greenstein, Shane  
 Huggett, Mark  
 Krasa, Stefan  
 Kuan, Chung-Ming  
 Maloney, William  
 Van Egteren, Henry  
 Villamil, Ann  
*Lecturers*  
 Graziano, Paulette

#### **Department of Finance**

*Professors*  
 Bryan, William R.  
 Bull, Ivan O.  
 Colwell, Peter F.  
 Finnerty, Joseph E.  
 Gentry, James A.  
 Hogan, John D.  
 Lakonishok, Josef  
 Linke, Charles M.  
*Associate Professors*  
 Cannaday, Roger E.  
 D'Arcy, Stephen P.  
 Lynge, Morgan J., Jr.  
 Park, Hun Y.  
 Pennacchi, George G.  
 Ritter, Jay R.  
 Whitford, David T.  
*Assistant Professors*  
 Chan, Louis K.C.  
 Dokko, Yoon  
 Flesaker, Bjorn  
 France, Virginia G.  
 Quigg, Laura J.

Rao, Gita R.  
 Sarkar, Asani

#### **COLLEGE OF COMMUNICATIONS**

##### **Department of Advertising**

*Professor*  
 Rotzoll, Kim B.  
 Srull, Thomas  
 Wartella, Ellen Ann  
*Associate Professors*  
 Haefner, James E.  
 O'Guinn, Thomas C.  
*Assistant Professors*  
 McCarty, John A.  
 Middlestadt, Susan E.  
 Narayana, Sunder  
 Otnes, Cornelia  
 Shavitt, Sharon

##### **Institute of Communications Research**

*Professor*  
 Guback, Thomas H.  
*Assistant Professors*  
 Braman, Sandra  
 Nerone, John C.

##### **Department of Journalism**

*Professors*  
 Carey, James W.  
 Christians, Clifford  
 Evans, James F.  
 Littlewood, Thomas B.  
*Associate Professors*  
 Aguirre, Carlos  
 Hays, Robert G.  
 Helle, Steven J.  
 Reid, Robert  
 Thomas, Jo  
 Whitney, Charles  
*Assistant Professors*  
 Alfeld, William W.  
 Barnhurst, Kevin G.  
 Finnegan, Terrence E.  
 Johnson, Brian K.  
 Liebovich, Louis  
*Lecturers*  
 Ewell, Dana  
 Follis, Jennifer  
 Kazel, Mitchell  
 Mohn, Fred

##### **Department of Radio and Television**

*Lecturer*  
 Mullally, Donald P.

#### **COLLEGE OF EDUCATION**

##### **Department of Administration, Higher, and Continuing Education**

*Professors*  
 Henderson, Robert A.  
 McGreal, Thomas  
*Associate Professors*  
 Farmer, James  
 Fley, Jo Ann  
 Thurston, Paul  
 Ward, James  
*Assistant Professors*  
 Kemp, John  
 Kozoll, Charles  
 Mabry, Frank  
 Merchant, Betty  
 Prestine, Nona  
 Schomberg, Steven  
 Wilson, Richard  
 Zodhiates, Philip P.

##### **Department of Curriculum and Instruction**

*Professors*  
 Boardman, Eunice L.  
 Braunfeld, Peter G.  
 Bruce, Bertram C., Jr.  
 Durkin, Dolores  
 Katz, Lilian  
 Manolakes, Theodore  
 Pearson, P. David  
 Peters, George D.  
 Rodgers, Frederick A.  
 Rubin, Louis J.  
 Spodek, Bernard  
 Travers, Kenneth J.  
 Walker, Jerry L.  
 Westbury, Ian D.  
*Associate Professors*  
 Armbruster, Bonnie  
 Barody, Arthur J.  
 Clift, Renee T.  
 Dennis, J. Richard  
 Kieffer, George H.  
 Koenke, Karl R.  
 Madsen, Alan L.  
 Tibbetts, Charlene N.  
 Weller, Charles M.  
*Assistant Professors*  
 Bresler, Liora  
 Brown, David E.  
 Copeland, Kathleen C.  
 Garcia, Georgia E.  
 Glidden, Peter L.  
 Harris, Violet J.  
 Walsh, Daniel James  
 Waugh, Michael L.

**Department of Educational Policy Studies***Professors*

Anderson, James D.  
Ennis, Robert H.  
Feinberg, Walter  
Karier, Clarence J.  
Smith, Ralph A.  
Violas, Paul C.

*Associate Professors*

Burbules, Nick  
Coombs, Fred S.  
Page, Ralph  
Perkins, Linda  
Shorish, Mobin  
Tozer, Steven  
Trent, William

*Assistant Professors*

Alston, Kal

**Department of Educational Psychology***Professors*

Ames, Carole  
Ames, Russell  
Anderson, Richard C.  
Asher, Steven R.  
Farmer, Helen S.  
Felner, Robert  
Harmon, Lenore W.  
Hill, Jacquetta  
Hill, Kennedy T.  
Ladd, Gary  
Loeb, Jane W.  
Mason, Jana M.  
McConkie, George  
Pearson, P. David  
Peshkin, Alan  
Rosenshine, Barak  
Spiro, Rand  
Stake, Robert E.  
West, Charles K.  
Zaccaria, Joseph S.

*Associate Professors*

Anderson, Thomas H.  
Copeland, Elaine J.  
Cziko, Gary  
Essex-Sorlie, Diane L.  
Fitzgerald, Louise  
Harnisch, Delwyn  
Levin, James  
Levine, Michael  
McClure, Erica F.  
Ory, John  
Rounds, James B.  
Schiro-Geist, Chrisann  
Scott-Jones, Diane  
Tanaka, Jeffrey  
Terwilliger, Edith R.  
Tracey, Terence  
Wardrop, James L.

*Assistant Professors*

Ackerman, Terry  
DeStefano, Lizanne  
Ellickson, Judy  
Hannum, James  
Langston, Ira  
Meyer, Linda  
Nagy, William  
Siegel, Martin A.  
Steinberg, Esther  
Vosniadou, Stella  
Zola, David

**Department of Special Education***Professors*

Heal, Laird W.  
Henderson, Robert A.  
Jordan, Laura J.  
Rusch, Frank R.  
Sprague, Robert L.  
*Associate Professors*  
Fowler, Susan A.  
Halle, James  
McCollum, Jeanette A.  
Renzaglia, Adelle  
*Assistant Professors*  
Chadsey-Rusch, Janis  
Gaffney, Janet  
Monda-Amaya, Lisa

**Department of Vocational and Technical Education***Professors*

Griggs, Mildred  
Kazanas, Hercules G.  
Malone, Violet  
Phelps, L. Allen  
Wentling, Tim  
*Associate Professors*  
Leach, James  
Nelson, Robert E.  
*Assistant Professor*  
Johnson, Scott

**COLLEGE OF ENGINEERING****Department of Aeronautical and Astronautical Engineering***Professors*

Bond, Charles E.  
Buckmaster, John D.  
Hopkins, Charles O.  
Ormsbee, Allen I.  
Palmore, Julian I.  
Prussing, John E.  
Sentman, Lee H.

Solomon, Wayne C.

Zak, Adam R.

*Associate Professors*

Barthel, Harold O.  
Beddini, Robert A.  
Bergman, Lawrence A.  
Bragg, Michael B.  
Burton, Rodney L.  
Conway, Bruce A.  
Lee, Ki D.  
Sivier, Kenneth R.  
Sri Namachchivaya, N.  
*Assistant Professors*  
Loth, Eric  
White, Scott R.

**Department of Agricultural Engineering***Professors*

Bode, Loren E.  
Christianson, Leslie L.  
Day, Donald L.  
Goering, Carroll E.  
Hummel, John W.  
Mitchell, J. Kent  
Muehling, Arthur J.  
Paulsen, Marvin R.  
Pershing, Roscoe L.  
Rodda, Errol D.  
Siemens, John C.  
*Associate Professors*  
Buriak, Philip  
Coddington, Richard C.  
Eckhoff, Steven R.  
Peterson, William H.  
*Assistant Professors*  
Aherin, Robert A.  
Hirschi, Michael C.  
Konyha, Kenneth D.  
Litchfield, J. Bruce  
Reid, John F.  
Riskowski, Gerald L.  
*Instructor*  
Schrader, Gregory W.

**Department of Civil Engineering***Professors*

Barenberg, Ernest J.  
Boyer, L. T.  
Carpenter, Samuel H.  
Cording, Edward J.  
Darter, Michael I.  
Dempsey, Barry J.  
Dodds, Robert H., Jr.  
Engelbrecht, Richard S.  
Foutch, Douglas A.  
Gamble, William L.  
Ghaboussi, Jamshid



Gurfinkel, German  
 Hall, William J.  
 Hawkins, Neil M.  
 Hendron, Alfred J., Jr.  
 Lawrence, Frederick V., Jr.  
 Liebman, Jon C.  
 Lopez, Leonard A.  
 Maxwell, W. H. C.  
 Melin, John W.  
 Mesri, Gholamreza  
 Mosborg, Robert J.  
 Murtha, Joseph P.  
 Nieto, Alberto S.  
 Pecknold, David A. W.  
 Pfeffer, John T.  
 Rittmann, Bruce E.  
 Robinson, Arthur R.  
 Schnobrich, William C.  
 Snoeyink, Vernon L.  
 Sozen, Mete Avni  
 Stallmeyer, James E.  
 Tang, Wilson H.  
 Thompson, Marshall R.  
 Walker, William H.  
 Wen, Yi-Kwei  
 Wenzel, Harry G., Jr.  
 Wong, Kam Wu  
 Yen, Ben Chie  
 Young, J. Francis  
*Associate Professors*  
 Abrams, Daniel P.  
 Eheart, J. Wayland  
 Herricks, Edwin E.  
 Hjelmstad, Keith D.  
 Paul, Stanley L.  
 Valocchi, A. J.  
*Assistant Professors*  
 Benekohal, Rahim F.  
 Clark, Mark M.  
 Freedman, David L.  
 Garcia, Marcelo H.  
 Ioannides, Anastasios M.  
 Larson, Susan M.  
 Long, James H.  
 Parsons, I. Dennis  
 Rood, Mark J.  
 Shaw, Douglas T.  
 Stark, Timothy D.  
 Struble, Leslie J.  
 Wood, Sharon L.  
*Lecturer*  
 Laffer, James  
 Lenzini, Peter A.  
*Research Engineer*  
 Fernandez, Gabriel

#### **Department of Computer Science**

##### *Professors*

Ahuja, Narendra  
 Belford, Geneva G.  
 Campbell, R. H.

Cybenko, George  
 Dershowitz, Nachum  
 Edelsbrunner, Herbert  
 Faيمان, Michael  
 Gray, John W.  
 Iyer, Ravi K.  
 Kang, Sung-Mo Steve  
 Kubitz, William J.  
 Kuck, David J.  
 Lawrie, Duncan H.  
 Levy, Allan H.  
 Liu, Chung L.  
 Liu, Jane W.-S.  
 Muller, David E.  
 Muroga, Saburo  
 Patel, Janak H.  
 Ray, Sylvian R.  
 Reingold, Edward M.  
 Sameh, Ahmed H.  
 Skeel, Robert D.  
 Wah, Benjamin W.-S.  
 Wolfram, Stephen  
 Wos, Lawrence  
*Associate Professors*  
 Banerjee, Prithviraj  
 DeJong, Gerald F., III  
 Friedman, H. George, Jr.  
 Fuchs, W. Kent  
 Harandi, Mehdi T.  
 Kamin, Samuel N.  
 Kerkhoven, Thomas  
 Lu, Stephen C-Y.  
 Mickunas, Marshall D.  
 Padua-Haiek, David A.  
 Petzold, Linda R.  
 Reed, Daniel A.  
 Rendell, Larry A.  
 Saylor, Paul E.  
*Assistant Professors*  
 Agha, Gul  
 Chien, Andrew A.  
 Condry, Michael W.  
 Emrath, Perry A.  
 Frisch, Alan M.  
 Gallivan, Kyle A.  
 Gallopoulos, Efstratios  
 Golin, Eric  
 Haney, Michael J.  
 Harrison, Williams L.  
 Harrod, William J.  
 Hayes, Caroline C.  
 Healey, Steven T.  
 Johnson, Ralph E.  
 Jones, Larry G.  
 Kale, Laxmikant  
 Kaplan, Simon Mark  
 Knapp, David W.  
 Lin, Kwei-Jay  
 Ng, Pui  
 Padmanabhan, Krishnan

Pitt, Leonard B.  
 Ponce, Jean  
 Reddy, Uday Sankara  
 Saab, Daniel G.  
 Saied, Faisal  
 Saleh, Resve A.  
 Vaidya, Pravin  
 Veidenbaum, Alexander  
 Wilkens, David C.  
 Winslett, Marianne S.  
 Yew, Pen-Chung

#### **Department of Electrical and Computer Engineering** *Professors*

Ahuja, Narendra  
 Basar, M. Tamer  
 Bishop, Stephen  
 Blahut, Richard E.  
 Blouke, Morley  
 Chato, John C.  
 Chew, Weng Cho  
 Cho, Alfred Y.  
 Coleman, James J.  
 Crowley, Joseph M.  
 Cybenko, George  
 DeTemple, Thomas A.  
 Dunn, Floyd  
 Eden, J. Gary  
 Feng, Milton  
 Gaddy, Oscar L.  
 Gardner, Chester S.  
 Hajek, Bruce E.  
 Hajj, Ibrahim N.  
 Hess, Karl  
 Holonyak, Nick, Jr.  
 Huang, Thomas S.  
 Hunsinger, Bill J.  
 Iyer, Ravishankar  
 Jenkins, W. Kenneth  
 Kang, Sung-Mo  
 Kim, Kyekyoon  
 Klock, Paul  
 Kokotovic, Petar V.  
 Kubitz, William J.  
 Kuck, David J.  
 Kumar, Panganamala  
 Lawrie, Duncan H.  
 Lee, Shung-Wu  
 Liu, Chao Han  
 Liu, Chung Laung  
 Liu, Jane W.-S.  
 Magin, Richard L.  
 Mayes, Paul E.  
 Medanic, Juraj V.  
 Miley, George H.  
 Mitra, R.  
 Munson, David C.  
 Muroga, Saburo  
 O'Brien, William D., Jr.  
 Pai, Mangalore A.  
 Patel, Janak H.

Perkins, William R.  
 Pines, David  
 Pursley, Michael B.  
 Ransom, Preston L.  
 Rao, N. Narayana  
 Ray, Sylvian R.  
 Robertson, James E.  
 Sarwate, Dilip V.  
 Sauer, Peter W.  
 Sechrist, Chalmers F., Jr.  
 Smith, Leslie G.  
 Spong, Mark W.  
 Stillman, Gregory E.  
 Trick, Timothy N.  
 Tucker, John R.  
 Turnbull, Robert J.  
 Verdeyen, Joseph T.  
 Wah, Benjamin  
 Yeh, Kung Chie  
*Associate Professors*  
 Adesida, Ilesanmi  
 Banerjee, Prithviraj  
 Barron, Andrew R.  
 Beauchamp, James W.  
 Brown, Donna J.  
 Cheng, Keh-Yung  
 Chuang, Shun-Lien  
 Cooper, Duane H.  
 DeJong, Gerald  
 Dipert, Arnold W.  
 Forbus, Kenneth D.  
 Franke, Steven J.  
 Frizzell, Leon A.  
 Fuchs, W. Kent  
 Kerkhoven, Thomas  
 Kudeki, Erhan  
 Kushner, Mark  
 Leburton, Jean-Pierre  
 Loui, Michael C.  
 Lyding, Joseph W.  
 Mechtly, Eugene A.  
 Merkelo, Henri  
 Morkoc, Hadis  
 Oakley, Burks, II  
 Poolla, Kameshwar R.  
 Schomer, Paul D.  
 Song, Bang Sup  
 Vojak, Bruce A.  
 Wheeler, Bruce C.  
 Yang, Ping  
*Assistant Professors*  
 Arun, Karalamangola  
 Brady, David  
 Bresler, Yoram  
 Fish, Raymond M.  
 Gallivan, Kyle  
 Hoskins, Michael  
 Hsieh, Kuang C.  
 Hutchinson, Seth

Hwu, Wen-Mei  
 Jones, Douglas L.  
 Kalé, Laxmikant  
 Krein, Philip T.  
 Meyn, Sean  
 Orchard, Michael  
 Papen, George  
 Polychronopoulos, C.  
 Rao, Vasant B.  
 Ravaioli, Umberto  
 Rendell, Larry A.  
 Saab, Daniel  
 Saleh, Resve  
 Schutt-Aine, Jose  
 Yew, Pen-Chung  
*Lecturers*  
 Basar, Tanguil  
 Uribe, Ricardo B.  
 Weston, Paul E.

#### **Department of General Engineering**

*Professors*  
 Conry, Thomas F.  
 Davis, Wayne J.  
 Kuznetsov, Edward N.  
 Medanic, Juraj V.  
 Metz, L. Daniel  
 Palmore, Julian I.  
 Spong, Mark W.  
*Associate Professors*  
 Burns, Scott A.  
 Coskunoglu, Osman  
 Goldberg, David E.  
 Hall, W. Brent  
 Moeinzadeh, Manssour  
 O'Bryant, David C.  
 Pleck, Michael H.  
 Reis, Henrique L. M. dos  
 Woodley, Thomas R.  
 Wozniak, Louis  
*Assistant Professors*  
 Kim, Yong Se  
 Strauss, Mark G.  
 Thompson, S. Daniel  
 Thurston, Deborah L.  
*Lecturers*  
 Chow, Weichien  
 Woodard, Bill D.  
*Adjunct Professors*  
 Hugelman, Rodney D.  
 Ruhl, Roland L.

#### **Department of Materials Science and Engineering**

*Professors*  
 Altstetter, Carl J.  
 Averbach, Robert S.  
 Berg, Morris  
 Berger, Richard L.

Birnbaum, Howard K.  
 Brown, Sherman D.  
 Buchanan, Relva C.  
 Chen, Haydn H.  
 Economy, James D.  
 Ehrlich, Gert  
 Gaylord, Richard J.  
 Geil, Phillip H.  
 Gibson, Murray  
 Greene, Joseph E.  
 Kumar, Ashok, Adjunct  
 Lawrence, Frederick V., Jr.  
 Nuzzo, Ralph  
 Payne, David A.  
 Rowland, Theodore J.  
 Schweizer, Kenneth  
 Stupp, Samuel I.  
 Wayman, C. Marvin  
 Wilcox, David  
 Wool, Richard P.  
 Young, J. Francis  
 Zaluzec, Nestor J.  
*Associate Professors*  
 Granick, Steve  
 Kriven, Waltraud M.  
 Rigsbee, J. Michael  
 Robertson, Ian M.  
 Wirtz, Gerald P.  
 Zangvil, Avigdor  
*Assistant Professors*  
 Abelson, John  
 Adams, Jim  
 Allen, Leslie  
 Homeny, Joseph  
 Kieffer, John  
 Lewis, Jennifer  
 Rockett, Angus  
 Shang, Jian-Ku

#### **Department of Mechanical and Industrial Engineering**

*Professors*  
 Addy, Alva L. (Tad)  
 Adrian, Ronald J.  
 Buckius, Richard O.  
 Bullard, Clark W.  
 Chato, John C.  
 Chen, Michael M.  
 Clausing, Arthur M.  
 Conry, Thomas F.  
 Cook, Harry E.  
 Cusano, Cristino  
 DeVor, Richard E.  
 Kapoor, Shiv G.  
 Krier, Herman  
 Liebman, Judith S.  
 Mazumder, Jyotirmoy  
 Moray, Neville P.  
 Pedersen, Curtis O.  
 Socie, Darrell F.



Soo, Shao L.  
 Stoecker, Wilbert F.  
 Tucker, Charles L., III  
 Walker, John A.  
 White, Robert A.  
*Associate Professors*  
 Assanis, Dennis N.  
 Bentsman, Joseph  
 Brewster, M. Quinn  
 Dantzig, Jonathan A.  
 Dunn, William E.  
 Dutton, J. Craig  
 Gieselman, Robert D.  
 Klein, Richard E.  
 Kramer, Arthur F.  
 Larson, Carl S.  
 Lu, Stephen C-Y.  
 Marriott, Douglas L.  
 Miller, Norman R.  
 Newell, Ty A.  
 Offner, David H.  
 Pearlstein, Arnc J.  
 Peters, James E.  
 Savage, Lester D., Jr.  
 Sehittoglu, Huseyin  
 Vanka, S. Pratap  
*Assistant Professors*  
 Crawford, Roy R.  
 Ferreira, Placid M.  
 Johnson, Mary A.  
 Palekar, U. S.  
 Philpott, Michael L.  
 Sanderson, Penelope M.  
 Thomas, Brian G.  
 Tortorelli, Daniel A.  
 Tsao, Tsu-chin  
 Vakakis, Alexander F.  
 Zaki, Hossam A.  
*Adjunct Faculty*  
 Ingram, Richard G.  
 Sutherland, John W.

#### **Department of Nuclear Engineering**

*Professors*  
 Axford, Roy A.  
 Cacuci, Dan G.  
 Jones, Barclay G.  
 Kim, Kyekyoon  
 Miley, George H.  
 Turnbull, Robert J.  
*Associate Professors*  
 Landsberger, Sheldon  
 Ragheb, Magdi  
 Ruzic, David N.  
 Singer, Clifford E.  
 Stubbins, James F.  
 Williams, John G.  
*Assistant Professors*  
 Choe, Won Ho

Ougouag, Abderraf  
 Schwartz, Justin  
*Affiliates*  
 Adrian, Ronald J.  
 Brown, Sherman D.  
 Bullard, Clark W.  
 Ducoff, Howard S.  
 Hanratty, Thomas J.  
 Magini, Richard L.  
 Merkelo, Henry  
 Moray, Neville  
 Swartz, Harold M.  
 Twardock, A. Robert  
 Verdeyen, Joseph T.  
 Walker, John

#### **Department of Physics**

*Professors*  
 Anderson, Ansel C.  
 Aspnes, David  
 Baym, Gordon A.  
 Brussel, Morton K.  
 Cardman, Lawrence S.  
 Chang, Shau-Jin  
 Chiang, Tai-Chang  
 Debevec, Paul T.  
 Debrunner, Peter G.  
 Eisenstein, Bob I.  
 Eisenstein, Robert A.  
 Flynn, C. Peter  
 Fradkin, Eduardo H.  
 Frauenfelder, Hans  
 Frois, Benard  
 Gibson, J. Murray  
 Ginsberg, Donald M.  
 Gladding, Gary E.  
 Granato, Andrew V.  
 Gratton, Enrico  
 Handler, Paul  
 Holloway, Leland E.  
 Hummel, John P.  
 Iben, Icko, Jr.  
 Jackson, E. Atlee  
 Jones, Lorella M.  
 Klein, Miles V.  
 Kogut, John B.  
 Lamb, Frederick K.  
 Leggett, Anthony J.  
 Mapother, Dillon E.  
 Martin, Richard M.  
 Mochel, Jack M.  
 Mouschovias, Telemachos  
 Nathan, Alan M.  
 O'Halloran, Thomas A., Jr.  
 Pandharipande, Vijay R.  
 Papanicolas, Costas N.  
 Pethick, Christopher J.  
 Pines, David  
 Propst, Franklin M.  
 Raether, Manfred J.

Ravenhall, D. Goeffrey  
 Salamon, Myron B.  
 Schulten, Klaus  
 Simmons, Ralph O.  
 Slichter, Charles P.  
 Smith, James H.  
 Smarr, Larry L.  
 Stack, John D.  
 Stapleton, Harvey J.  
 Sullivan, Jeremiah D.  
 Thaler, Jon J.  
 Watson, William D.  
 Weissman, Michael B.  
 Wiss, James E.  
 Wolfe, James P.  
 Wolfram, Stephen  
 Wyld, Henry W., Jr.  
 Young, Robert D.  
 Zabel, Hartmut  
*Associate Professors*  
 Ceperley, David  
 Chang, Yia-Chung  
 Cooper, Duane H.  
 Errede, Steven M.  
 Gollin, George D.  
 Lamb, Susan A.  
 Nayfeh, Munir H.  
 Oono, Yoshitsugu  
 Schult, Roy L.  
 Stone, Michael  
 Sutton, David C.  
 Van Harlingen, Dale J.  
 Wambach, Jochen K.  
*Assistant Professors*  
 Beck, Douglas H.  
 Cooper, S. Lance  
 Goldbart, Paul M.  
 Goldenfeld, Nigel D.  
 Hertzog, David W.  
 Hubler, Alfred W.  
 Liss, Tony M.  
 Packard, Norman H.

#### **Department of Theoretical and Applied Mechanics**

*Professors*  
 Adrian, Ronald J.  
 Carlson, Donald E.  
 Clark, Marlyn E.  
 Costello, George A.  
 Johnson, Robert E.  
 Miller, Robert E.  
 Phillips, James W.  
 Rizzo, Frank J.  
 Walker, John S.  
*Associate Professors*  
 Haber, Robert B.  
 Harris, John G.  
 Riahi, Daniel N.  
 Stewart, D. Scott  
 Weaver, Richard L.

*Assistant Professors*

Balachandar, S.  
Lawrence, Christopher J.  
Shawki, Tarek G.  
Sottos, Nancy R.

## COLLEGE OF FINE AND APPLIED ARTS

**School of Architecture***Professors*

Ali, Mir M.  
Anderson, James  
Bognar, Botond  
Forrester, R. Alan  
Garner, John  
Hutchings, Bruce  
Kim, Michael K.  
Lanford, Samuel  
Lewis, Walter  
Miller, H. James  
Mooney, Robert T.  
Notaras, Alec  
O'Connell, William  
Riley, Robert  
Warfield, James  
White, Hub C.  
Wickersheimer, David

*Associate Professors*

Albrecht, Johann  
Andrejasich, Michael J.  
Anthony, Kathryn H.  
Betts, Richard  
Clay, Ernest  
Dry, Carolyn  
Erwin, William  
Leffers, Lloyd  
Ousterhout, Robert  
Plummer, Henry  
Schmitt, Ronald  
Selby, Robert  
Simon, James  
Smith, Robert  
Voelker, William J., III

*Assistant Professors*

Armstrong, Paul J.  
Hinders, Kevin  
Krnky, Paul  
Poss, Jeffery

*Lecturers*

Kaha, Arthur  
Reese, John

**School of Art and Design***Professors*

Blakley, Roger  
Bodnar, Peter  
Carlson, Bill  
Colley, David

Fagan, Peter  
Fineberg, Jonathan  
Franciscono, Marcel  
Gallo, Frank  
Grucza, Leo  
Gunter, Frank  
Hardiman, George  
Kovacs, Tom  
Maguire, Henry  
Moore, Doyle  
Munakata, Kiyo  
Nettles, Bea  
Pilcher, Don  
Prokopoff, Stephen  
Rowan, Dennis  
Sato, Shozo  
Savage, Jerry  
Socha, Dan  
Wicks, Eugene  
Youngman, Bob  
Zernich, Ted  
Ziff, Jerry

*Associate Professors*

Arends, Mark  
Bushman, David  
Carls, Ken  
Cox, Donna  
Degenevieve, Barbara  
Flack, Steve  
Glaze, Anita  
Kotoske, Roger  
Krepp, Sarah  
Lancaster, Ed  
Manthorne, Katherine  
Martens, Chris  
Mette, Alan  
Moses, Dick  
North, Peter  
Orso, Steven  
Rascheff, Julius  
Stephens, Curtis  
Van Laar, Tim

*Assistant Professors*

Douglas, Robin  
Fisher, Carol  
Goggin, Nan  
Gunji, Kimiko  
Guthrie, Gerald  
Hedeman, Anne  
Kendrick, Barbara  
Kovatch, Ron  
Kursel, Peter  
Maguire, Eunice  
Robbennolt, Linda  
Ryan, David  
Springfield, Robert  
Theide, Billie  
Thompson, Christine

*Lecturers*

Bales, Sandra  
Gardner, Nancy

*Adjunct Assistant Professor*

Nakane, Toshiko  
Scheinman, Muriel

## Department of Dance Professors

Knowles, Patricia  
*Assistant Professors*  
Snyder, Diana  
Swaim, David  
Williamson, Karen

*Lecturers*

Nettl-Fiol, Rebecca  
Pipkin-Doyle, Cynthia  
Wadleigh, Renee  
*Artists-in-residence augment the resident faculty on a continuous basis.*

## Department of Landscape Architecture

*Professors*

Anderson, James R.  
Bellafore, Vincent J.  
Harkness, Terence G.  
Hopkins, Lewis D.  
Jakle, John A.  
Nelson, William R., Jr.  
Riley, Robert B.  
Weidemann, Sue  
*Associate Professors*  
Hammond, Jonathan  
Kesler, Gary B.  
Orland, Brian  
*Assistant Professors*  
Anthony, Kathryn H.  
Emmerling-DiNovo, Carol A.  
Helgesen, Marlene G.  
Johnston, Douglas M.  
Kovacic, David A.  
Vining, Joanne  
*Instructor*  
Alpert, Natalie B.

**School of Music***Professors*

Bailey, James  
Berry, Sanford  
Boardman, Eunice  
Brun, Herbert  
Crawford, Frances  
Dalheim, Eric  
Davenney, Ward  
DiVirgilio, Nicholas  
Drake, Kenneth  
Dunn, Mignon  
Edlefsen, Blaine  
Elyn, Mark  
Fredrickson, Thomas  
Garvey, John  
Gray, Robert  
Gushee, Lawrence  
Hedlund, Ronald



Heiles, William  
 Hill, John  
 Hobson, Ian  
 Hoffman, Mary  
 Keene, James  
 Kellman, Herbert  
 Klippstatter, Kurt  
 Kohut, Daniel  
 Leonhard, Charles  
 Lyke, James  
 Martirano, Salvatore  
 Melby, John  
 Moses, Don  
 Murray, Alexander  
 Nettle, Bruno  
 Peters, G. David  
 Powell, Morgan  
 Ringer, Alexander  
 Sanders, Dean  
 Schaffer, Peter  
 Shapiro, Joel  
 Siwe, Thomas  
 Temperley, Nicholas  
 Vermel, Paul  
 Wisniewski, Thomas  
 Wustman, John  
 Zimmerman, Marilyn  
 Zonn, Paul Martin  
*Associate Professors*  
 Alexander, Reid  
 Alwes, Chester  
 Beauchamp, James  
 Browning, Zack  
 Capwell, Charles  
 Ewald, Michael  
 Grant, Joe  
 Harris, J. David  
 Jones, Ann Howard  
 Laufman, Laurien  
 Luloff, Joseph  
 Machala, Kazimierz  
 Moore, Mark  
 Olson, William  
 Rosen, Nathaniel  
 Sasaki, Ray  
 Smith, Gary  
 Stone, Sylvia  
 Tipei, Sever  
 Von Gunden, Heidi  
 Ward, Tom  
 Wyatt, Scott  
*Assistant Professors*  
 Brooks, William  
 Cameron, Michael  
 Davis, Ollie Watts  
 Fairchild, Frederick  
 Farmer, Virginia  
 Farris, Michael  
 Harwood, Eve  
 Lund, Erik

Lupu, Sherban  
 McClelland, Michael  
 Rath, Edward  
 Turino, Thomas  
 Westendorf, Craig  
*Lecturers*  
 Birdwell, J. Cody  
 Bobak, Mark  
 Keene, Alice  
 Kocour, Michael  
 Schleis, Thomas  
 Whiting, Stephen

### **Department of Theatre**

#### *Professors*

Ahart, John  
 Harris, James Berton  
 Hobgood, Burnet M.  
 Knight, David  
 Maclay, Joanna  
 McClure, Wendy  
 Tymchyshyn, Roman  
 Works, Bernhard R.

#### *Associate Professors*

Brady, Paul  
 Dunn, Jason C.  
 Graves, Robert  
 McFarquhar, Robin  
 Mitchell, Thomas  
*Assistant Professors*  
 Beebe, Richard R.  
 Caton, Ray  
 Griggs, J. Michael

Jones, Terrence  
 Korder, Thomas  
 Lines, Janice  
 McDonald, Susan  
 Perkins, Kathy  
 Taylor, Janet  
 Raphael-Schirmer, Nanalee  
 Schoenoff, Jon

#### *Instructors*

Blake, Thomas  
 King, Russ  
 Natarella, Nicholas  
 Stacy, Kathleen  
 Uhrick, Richard

### **Department of Urban and Regional Planning**

#### *Professors*

Forrest, Clyde W.  
 Heumann, Leonard F.  
 Hewings, Geoffrey J. D.  
 Hopkins, Lewis D.  
 Kim, T. John  
 Lim, Gill-Chin  
*Associate Professors*  
 Osborne, Lewis L.  
 Phillips, Phillip  
 Quinn, John A.

*Assistant Professors*  
 Donaghy, Kieran P.  
 Husband, Eliza K.  
 Knaap, Gerrit J.  
 Olshansky, Robert B.  
 Reardon, Kenneth M.

## **COLLEGE OF LIBERAL ARTS AND SCIENCES**

### **Department of Anthropology**

#### *Professors*

Bareis, Charles J.  
 Bruner, Edward M.  
 Cunningham, Clark E.  
 Dillehay, Tom D.  
 Giles, Eugene  
 Grove, David C.  
 Keller, Janet D.  
 Lehman, Frederic K.  
 Mayer, Enrique  
 Nettle, Bruno  
 Plath, David W.  
 Whitten, Norman E., Jr.  
 Zuidema, R. Tom

#### *Associate Professors*

Garber, Paul A.  
 Keller, Charles M.  
 Klepinger, Linda K.  
 Lewis, R. Barry  
 Riley, Thomas J.  
 Saul, Mahir  
 Soffer-Bobyshev, Olga  
*Assistant Professors*  
 Ambrose, Stanley H.  
 Brewer, Douglas J.  
 Gottlieb, Alma  
 Pope, Geoffrey G.  
 Silverman, Helaine

### **Department of Astronomy**

#### *Professors*

Crutcher, Richard M.  
 Dickel, John R.  
 Iben, Icko, Jr.  
 Kaler, James B.  
 Lamb, Frederick K.  
 Lo, Kwok-Yung  
 Mihalas, Dimitri M.  
 Mouschovias, Telemachos  
 Olson, Edward C.  
 Smarr, Larry L.  
 Snyder, Lewis E.  
 Swenson, George W., Jr.  
 Truran, James W.  
 Watson, William D.  
 Webbink, Ronald F.  
 Yoss, Kenneth M.

*Associate Professors*  
 Norman, Michael  
 Sutton, Edmund  
 Thompson, Laird  
*Assistant Professors*  
 Mihalas, Barbara W.

### **Department of Biochemistry**

*Professors*  
 Clark, John M., Jr.  
 Cronan, John E.  
 Gennis, Robert B.  
 Glaser, Michael  
 Gumpert, Richard I.  
 Hager, Lowell P.  
 Horwitz, Alan F.  
 Jonas, Ana  
 Ordal, George W.  
 Shapiro, David J.  
 Sligar, Stephen G.  
 Switzer, Robert L.  
*Associate Professors*  
 Schuler, Mary A.  
 Wand, A. Joshua  
*Assistant Professors*  
 Belmont, Andrew S.  
 Kaput, James A.  
 Karr, Timothy L.  
 Kranz, David M.  
 Orlean, Peter A. B.  
 Widom, Jonathan  
 Wise, Jo Ann

### **Department of Cell and Structural Biology**

*Professors*  
 Greenough, William T.  
 Horwitz, Alan F.  
 Katzenellenbogen, Benita S.  
 Kemper, Byron W.  
 O'Morchoe, Charles C.C.  
 O'Morchoe, Patricia J.  
 Steffensen, Dale M.  
*Associate Professors*  
 Cameron, Jo Ann  
 Daniel, William L.  
 Gillette, Martha U.  
 Kaufman, Stephen J.  
 Kokko-Cunningham, Aulikki  
 Lazarowitz, Sondra  
 MacLeod, Roderick  
 Mittenthal, Jay E.  
 Weyhenmeyer, James A.  
*Assistant Professors*  
 Belmont, Andrew S.  
 Blackman, Ronald K.  
 Clayton, David F.  
 Doe, Chris Q.  
 Hough, John C., Jr.  
 Kaput, James A.  
 Karr, Timothy L.

### **Department of Chemical Engineering**

*Professors*  
 Alkire, Richard C.  
 Hanratty, Thomas J.  
 Masel, Richard I.  
 McHugh, Anthony J.  
*Associate Professors*  
 Higdon, Jonathan J. L.  
 Stadtherr, Mark A.  
*Assistant Professors*  
 Seebauer, Edmund G.  
 van Swol, Frank B.  
 Wittrup, K. Dane  
 Zukoski, Charles F.

### **Department of Chemistry**

*Professors*  
 Beak, Peter  
 Belford, R. Linn  
 Brown, Theodore L.  
 Coates, Robert M.  
 Denmark, Scott E.  
 Drickamer, Harry G.  
 Faulkner, Larry R.  
 Frauenfelder, Hans  
 Gennis, Robert B.  
 Gutowsky, H. S.  
 Hummel, John P.  
 Jonas, Jiri  
 Katzenellenbogen, John A.  
 Klemperer, Walter G.  
 Lauterbur, Paul C.  
 McDonald, J. Douglas  
 Oldfield, Eric  
 Paul, Iain C.  
 Pirkle, William H.  
 Rauchfuss, Thomas B.  
 Rinehart, K. L.  
 Schuster, Gary B.  
 Secrest, Donald H.  
 Shapley, John R.  
 Slichter, Charles P.  
 Sligar, Stephen G.  
 Smith, Stanley G.  
 Suslick, Kenneth S.  
 Wolynes, Peter G.  
 Zumdahl, Steven S.  
*Associate Professors*  
 Dlott, Dana D.  
 Lisy, James M.  
 Melhado, Evan M.  
 Nieman, Timothy A.  
 Scheeline, Alexander  
 Wieckowski, Andrzej  
*Assistant Professors*  
 Bohn, Paul W.  
 Gellman, Andrew J.  
 Gewirth, Andrew A.  
 Girolami, Gregory S.  
 Jacobsen, Eric N.

Kahn, Scott  
 Shapley, Patricia A.  
 Widom, Jonathan  
 Zimmerman, Steven C.

### **Department of the Classics**

*Professors*  
 Bateman, John J.  
 Browne, Gerald M.  
 Calder, William M. III  
 Jacobson, Howard  
 Newman, John K.  
 Sansone, David  
 Scanlan, Richard T.  
 Schoedel, William R.  
 Zgusta, Ladislav  
*Associate Professors*  
 Dengate, James A.  
 Hock, Hans H.  
*Assistant Professors*  
 Olson, S. Douglas  
 Parca, Maryline G.  
 Rainer, Brian L.  
 Relihan, Joel C.

### **Program in Comparative Literature**

*Professors*  
 Blake, Nancy  
 Hollerer, Walter  
 Knust, Herbert  
 Marchand, James W.  
 Palencia-Roth, Michael  
 Tikku, Girdhari L.  
*Associate Professor*  
 Smarr, Janet L.

### **East Asian Studies and Pacific Studies**

*Professors*  
 Cheng, Chin-Chuan  
 Ebrey, Patricia B.  
 Goodman, David  
 Kim, Chin W.  
 Makino, Seiichi  
 Mulhern, Chieko I.  
 Plath, David W.  
 Schran, Peter  
 Toby, Ronald P.  
 Yu, George  
*Associate Professors*  
 Chang, Richard F.  
 Gregory, Peter N.  
 Haboush, JaHyun K.  
 MacDonald, William L.  
*Assistant Professors*  
 Abelmann, Nancy  
 Chow, Kai-wing



**Department of Ecology,  
Ethology, and Evolution**  
*Professors*

Batzli, George O.  
Burkhardt, Richard W., Jr.  
Burley, Nancy  
Frazzetta, Thomas H.  
Getz, Lowell L.  
Ghent, Arthur W.  
Hirsch, Jerry  
Nanney, David  
Page, Lawrence M.  
Philipp, David P.  
Portnoy, Stephen L.  
Whitt, Gregory  
Woese, Carl R.

*Associate Professors*  
Herricks, Edwin E.  
Kieffer, George H.  
Larkin, Ronald P.  
Robinson, Scott K.  
Ross, Philippe E.  
Sweeney, Daryl C.  
Uzzell, Thomas  
Yokoyama, Shozo  
*Assistant Professors*  
Conner, Jeffrey K.  
Paige, Ken N.  
Wahl, David H.

**Department of English**  
*Professors*

Baron, Dennis  
Baym, Nina  
Brandabur, Edward J.  
Carringer, Robert  
Cole, Howard C.  
Frayne, John P.  
Friedman, John B.  
Friedman, Paul  
Garrett, Peter K.  
Guibbory, Achsah  
Hendrick, George  
Hurt, James R.  
Kramer, Dale V.  
Lieberman, Laurence J.  
Nelson, Cary R.  
Sanders, Charles  
Shuman, R. Baird  
Stillinger, Jack C.  
Thompson, Jean  
Tibbetts, Arnold M.  
Van Walleghen, Michael  
Waldoff, Leon  
Watts, Emily S.  
Wheeler, Richard  
*Associate Professors*  
Adelman, Gary S.  
Costello, Mark P.  
Danielson, Larry W.  
Douglas, George H.

Dundas, O. Judith  
Dussinger, John A.  
Fontenot, Chester J.  
Fumento, Rocco L.  
Hawisher, Gail  
Hinely, Jan  
Hogan, Donald J.  
Kaufman, Anthony D.  
Kaufmann, U. Milo  
Kay, W. David  
Klein, Joan L.  
Kyle, Carol A.  
Majdiak, Daniel T.  
Marder, Herbert  
Michelson, Bruce  
Mullin, Michael A.  
Parker, Robert  
Shapiro, Michael  
Smalley, Barbara  
Stottlar, James F.  
Sullivan, Zohreh

*Assistant Professors*  
Chai, Leon  
Cruikshank, Donald  
Curry, Ramona  
Deck, Alice  
Graham, Philip  
Jacobson, David  
Kelly, Brigit  
Muir, Stuart  
Pemberton, Michael  
Sullivan, Edward E., Jr.  
Sullivan, Robert  
Weiss, Timothy  
Wright, Charles D.

**Division of English as an  
International Language**  
*Professors*

Bokamba, Eyamba  
Cheng, C. C.  
Dickerson, Wayne B.  
Hock, Hans H.  
Kachru, Yamuna  
Kim, Chin-Woo  
Maclay, Howard  
Savignon, Sandra  
Zgusta, Ladislav  
*Associate Professors*  
Bouton, Lawrence F.  
Cowan, J. Ronayne  
Cziko, Gary  
*Assistant Professors*  
Davidson, Fred  
Gonzo, Susan  
Mack, Molly  
Markee, Numa  
Taylor, Susan  
Temperley, Mary

**Department of Entomology**  
*Professors*

Berenbaum, May R.  
Friedman, Stanley  
Ghent, Arthur W.  
Irwin, Michael E.  
Kogan, Marcos  
LaBerge, Wallace E.  
Metcalf, Robert T.  
Ruesink, William G.  
Waldbauer, Gilbert P.  
Willis, Judith H.  
*Associate Professors*  
Berlocher, Stewart H.  
Delcomyn, Fred  
MacLeod, Ellis G.  
Maddox, Joseph V.  
*Assistant Professors*  
Fahrbach, Susan E.  
Robertson, Hugh M.  
Robinson, Gene E.

**Department of French**  
*Professors*

Accad, Evelyne  
DeLey, Herbert C., Jr.  
Gaeng, Paul A.  
Jahiel, Edwin  
Mortimer, Armine Kotin  
Nelson, Robert J.  
Savignon, Sandra J.  
Talbot, Emile J.  
*Associate Professors*  
Gray, Stanley E.  
Hadley, Alice Omaggio  
Jenkins, Frederic M.  
Rosello, Mireille  
*Assistant Professors*  
Fresco, Karen  
Kibbee, Douglas A.  
Lepetit, Daniel  
Mathy, Jean-Philippe  
Savignon, Gabriel M.  
Shinall, Stanley L.

**Department of Geography**  
*Professors*

Fellmann, Jerome D.  
Getis, Arthur  
Hannon, Bruce M.  
Hewings, G.J.D.  
Huff, James O.  
Jakle, John A.  
Johnson, Donald L.  
Thompson, John  
*Associate Professors*  
Frank, Thomas D.  
Isard, Scott A.  
Thorn, Colin E.  
*Assistant Professors*  
Bassett, Thomas  
Elhance, Arun P.

Rhoads, Bruce L.  
Wilson, David

### **Department of Geology**

#### *Professors*

Anderson, David E.  
Anderson, Thomas F.  
Blake, Daniel B.  
Hay, Richard L.  
Johnson, W. Hilton  
Kirkpatrick, R. James  
Klein, George deV.  
Langenheim, Ralph L., Jr.  
Mann, C. John  
Nieto, Alberto S.  
Sandberg, Philip A.

#### *Associate Professors*

Altaner, Stephen P.  
Bass, Jay  
Bethke, Craig M.  
Chen, Wang-Ping  
Hsui, Albert T.  
Marshak, Stephen  
*Assistant Professors*  
Chen, Chu-Yung  
Massmann, Joel

### **Department of Germanic Languages and Literatures**

#### *Professors*

Antonsen, Elmer H.  
Gerlach, U. Henry  
Haile, H. G.  
Hollerer, Walter  
Kalinke, Marianne E.  
Knust, Herbert  
Lorbe, Ruth E.  
Marchand, James W.  
McGlathery, James M.  
Schoeps, Karl-Heinz  
*Associate Professors*  
Lalande, John F.  
Wright, Rochelle  
*Assistant Professors*  
Chirita, Diana  
Wade, Mara R.

### **Department of History**

#### *Professors*

Arnstein, Walter L.  
Berdahl, Robert M.  
Bernard, Paul P.  
Buckler, John  
Burkhardt, Richard W.  
Burton, Orville V.  
Crummey, Donald E.  
Eastman, Lloyd E.  
Ebrey, Patricia B.  
Hitchins, Keith  
Jaher, Frederic C.  
Jennings, Ronald C.  
Johannsen, Robert W.

Jones, Robert A.  
Kling, Blair B.  
Koenker, Diane P.  
Love, Joseph L.  
McColley, Robert M.  
McKay, John P.  
Mitchell, Richard E.  
Parker, Geoffrey  
Queller, Donald E.  
Schroeder, Paul W.  
Solberg, Winton U.  
Stewart, Charles C.  
Toby, Ronald P.  
Walker, Juliet E. K.  
Widenor, William C.

#### *Associate Professors*

Barrett, James R.  
Hibbard, Caroline M.  
Leff, Mark  
Littlefield, Daniel C.  
Lynn, John A.  
Melhado, Evan M.  
Prochaska, David  
Pruett, John H.  
Uroff, Benjamin  
*Assistant Professors*  
Chow, Kai-wing  
Cuno, Kenneth  
Fritzsche, Peter  
Hanes, Jeffrey E.  
Jacobsen, Nils  
Liebersohn, Harry  
McLaughlin, M. Megan  
Michel, Sonya A.  
Schneider, Dorothee  
Verner, Andrew M.

### **School of Life Sciences**

#### *Associate Professors*

Brown, Edward H., Jr.  
Davenport, Richard  
Sargent, Malcolm L.

### **Department of Linguistics**

#### *Professors*

Antonsen, Elmer  
Aston, Katharine  
Baron, Dennis E.  
Blaylock, William C.  
Bokamba, Eyamba G.  
Browne, Gerald M.  
Cheng, Chin-Chuan  
Dawson, Clayton L.  
Gaeng, Paul A.  
Green, Georgia M.  
Hock, Hans H.  
Kachru, Braj B.  
Kachru, Yamuna  
Kenstowicz, Michael J.  
Kim, Chin-Woo  
Kisseberth, Charles

Kuehn, David  
Lehman, Frederic K.  
MacLay, Howard  
Makino, Seiichi  
Marchand, James W.  
Morgan, Jerry L.  
Tikku, Girdhari L.  
Zgusta, Ladislav  
*Associate Professors*  
Bouton, Lawrence F.  
Cowan, J. Ronayne  
Dickerson, Wayne B.  
Dunatov, Rasio  
Gladney, Frank Y.  
Jenkins, Frederic M.  
Pandharipande, R. V.  
*Assistant Professors*  
Cassimjee, Farida  
Hart, Robert  
Hinrichs, Erhard U.  
Hualde, Jose I.  
Mack, Molly  
Markee, Numa

### **Department of Mathematics**

#### *Professors*

Albrecht, Felix R.  
Alexander, John R., Jr.  
Appel, Kenneth I.  
Bank, Steven B.  
Berg, I. David  
Berkson, Earl R.  
Berndt, Bruce C.  
Bishop, Richard L.  
Bourgain, Jean  
Braunfeld, Peter G.  
Burkholder, Donald L.  
Carroll, Robert W.  
Craggs, Robert F.  
Dade, Everett C.  
D'Angelo, John P.  
Diamond, Harold G.  
Evans, E. Graham, Jr.  
Fossum, Robert M.  
Francis, George K.  
Goldberg, Samuel I.  
Gray, John W.  
Grayson, Daniel R.  
Griffith, Phillip A.  
Haboush, William J.  
Haken, Wolfgang R. G.  
Halberstam, Heini  
Hamstrom, Mary-Elizabeth  
Helms, Lester L.  
Henson, C. Ward  
Janusz, Gerald J.  
Jerrard, Richard P.  
Jockusch, Carl G.  
Kamber, Franz W.  
Kaufman, Robert P.



Knight, Frank B.  
 Langebartel, Ray G.  
 Loeb, Peter A.  
 Lotz, Heinrich P.  
 McCulloh, Leon R.  
 McLinden, Lynn  
 Miles, Joseph B.  
 Muller, David E.  
 Osborn, Howard A.  
 Palmore, Julian I.  
 Peck, N. Tenney  
 Peressini, Anthony L.  
 Philipp, Walter V.  
 Porta, Horatio A.  
 Ranga, Rao R.  
 Reznick, Bruce  
 Robinson, Derek J. S.  
 Rotman, Joseph J.  
 Rubel, Lee A.  
 Schupp, Paul E.  
 Stolarsky, Kenneth B.  
 Suzuki, Michio  
 Takeuti, Gaisi  
 Ting, Tsuan-Wu  
 Tondeur, Philippe M.  
 Uhl, J. Jerry, Jr.  
 Ullom, Stephen V.  
 Van den Dries, Lou  
 Walter, John H.  
 Weichsel, Paul M.  
 Wetzell, John E.  
 Wolfram, Stephen  
 Wu, Jang-mei Gloria  
*Associate Professors*  
 Alexander, Stephanie Brewer  
 Aviles, Patricio  
 Babakhanian, Ararat  
 Brown, John W.  
 Dornhoff, Larry L.  
 Dutta, Sankar  
 Hildebrand, Adolf  
 Hinkkanen, Aimo  
 Monrad, Ditlev  
 Muncaster, Robert G.  
 Paley, Hiram  
 Portnoy, Esther  
 Sherbert, Donald R.  
 Weinberg, Elliot C.  
 West, Douglas  
 Zaring, Wilson M.  
*Assistant Professors*  
 Bergvelt, Maarten  
 Boston, Nigel  
 Gray, Eva Wirth  
 Newton, Paul  
 Nicolau, Monica  
 Reiner, Irma Moses  
 Ruan, Zhong-jin  
*Instructor*  
 Ash, Carol A.

## Department of Microbiology

### *Professors*

Cronan, John E., Jr.  
 Konisky, Jordan  
 Miller, Charles G.  
 Reichmann, Manfred E.  
 Salyers, Abigail A.  
 Tuveson, Robert W.  
 Voss, Edward W., Jr.  
 Woese, Carl R.  
 Wolfe, Ralph S.  
*Associate Professors*  
 Gardner, Jeffrey F.  
 Lazarowitz, Sondra  
 Maloy, Stanley R.  
*Assistant Professors*  
 Bankaitis, Vytautas  
 Helm, Alice C.  
 Olsen, Gary  
 Pratt, Charles

## Department of Philosophy

### *Professors*

Caton, Charles E.  
 Melnick, Arthur  
 Mohr, Richard D.  
 Schacht, Richard L.  
 Wallace, James D.  
 Winch, Peter G.  
*Associate Professors*  
 Baron, Marcia W.  
 Chandler, Hugh S.  
 McCarthy, Timothy G.  
 McKim, Robert J.  
 Neely, F. Wright  
 Schmitt, Frederick R.  
 Schroeder, William R.  
 Wagner, Steven J.  
 Wengert, Robert G.  
*Assistant Professors*  
 Akins, Kathleen  
 Maher, Patrick L.  
 McMahan, Jefferson A.

## Department of Physiology and Biophysics

### *Professors*

Bahr, Janice M.  
 Barr, Lloyd  
 Buetow, Dennis E.  
 Crofts, Antony R.  
 DeBrunner, Peter G.  
 DeVries, Arthur L.  
 Donchin, Emanuel  
 Ducoff, Howard S.  
 Dunn, Floyd  
 Ebrey, Thomas G.  
 Feng, Albert S.  
 Frauenfelder, Hans  
 Gennis, Robert B.  
 Govindjee

Greenough, William T.  
 Heath, James E.  
 Helman, Sandy I.  
 Jackson, Gary L.  
 Katzenellenbogen, Benita S.  
 Kemper, Byron W.  
 Lauterbur, Paul C.  
 Nelson, Ralph A.  
 Ramirez, Victor D.  
 Satinoff, Evelyn  
 Schulten, Klaus J.  
 Sherwood, O. David  
 Siegel, Ivens A.  
 Swartz, Harold M.  
 Twardock, A. Robert  
 Wang, Andrew H. J.  
 Willis, John S.  
 Wolynes, Peter G.  
 Wraight, Colin A.  
 Zehr, John E.  
*Associate Professors*  
 Best, Philip M.  
 Dawson, M. Joan  
 Delcomyn, Fred  
 Gillette, Martha U.  
 Gillette, Rhanor  
 Gratton, Enrico  
 Holzwarth, Matilde  
 Jakobsson, Eric  
 Kokko-Cunningham, Aulikki  
 Mantulin, William W.  
 Oakley, Burks  
 Roy, Edward J.  
 Sweeney, Daryl C.  
 Waldrop, Tony G.  
*Assistant Professors*  
 Lin, Kuo-Kuang  
 Meisami, Esmail  
 Nelson, Mark E.  
 Widom, Jonathan

## Department of Plant Biology

### *Professors*

Buetow, Dennis E.  
 Carothers, Zane B.  
 Crang, Richard E.  
 Dickinson, David B.  
 Govindjee  
 Hoffman, Larry R.  
 Ort, Donald R.  
 Phillips, Tom L.  
 Seigler, David S.  
 Shearer, Carol A.  
 Tuveson, Robert W.  
 Wraight, Colin A.  
*Associate Professors*  
 Augspurger, Carol K.  
 Cheeseman, John M.  
 Jones, Almut G.  
 Sargent, Malcolm L.

Schuler, Mary A.  
Whitmarsh, C. John  
Zielinski, Raymond E.  
*Assistant Professors*  
Bush, Daniel R.  
DeLucia, Evan H.  
Jacobs, Thomas W.

### **Department of Political Science**

*Professors*  
Carmen, Ira H.  
Cohen, Stephen P.  
Fields, A. Belden  
Kanet, Roger E.  
Kolodziej, Edward A.  
Kuklinski, James H.  
Linowes, David F.  
Merritt, Richard  
Nagel, Stuart S.  
Nardulli, Peter F.  
Rich, Robert  
Weinbaum, Marvin G.  
Weissberg, Robert  
Wirt, Frederick M.  
Yu, George T.  
Zinnes, Dina A.  
*Associate Professors*  
Cohen, Jeffrey  
Diehl, Paul F.  
Douglas, Stephen A.  
Pinderhughes, Dianne  
Seitz, Steven T.  
Weinstein, Martin E.  
*Assistant Professors*  
Bowen, Merle  
Diamond, Gregory A.  
Grynspan, Devora  
Krassa, Michael  
Lepingwell, John W. R.  
McBurnett, Michael D.  
Mock, Carol  
Munck, Gerardo L.  
Rich, Lucille A. S.  
Staal, Rein J.

### **Department of Psychology**

*Professors*  
Anderson, Richard C.  
Arabie, Phipps  
Bernstein, Douglas A.  
Brewer, William F.  
Clore, Gerald, L., Jr.  
Cohen, Jozef B.  
Coles, Michael G. H.  
Davis, James H.  
Diener, Edward  
Donchin, Emanuel  
Dulany, Donelson E., Jr.  
Dweck, Carol  
Eriksen, Charles W.

Fishbein, Martin  
Gabriel, Michael  
Greenough, William T.  
Hill, Kennedy T.  
Hirsch, Jerry  
Hopkins, Charles O.  
Hubert, Lawrence  
Hulin, Charles L.  
Jones, Lawrence E.  
Kanfer, Frederick H.  
Komorita, Samuel S.  
Laughlin, Patrick R.  
Loeb, Jane W.  
Logan, Gordon  
Malpeli, Joseph G.  
McGrath, Joseph E.  
Moray, Neville  
Rappaport, Julian  
Satinoff, Evelyn  
Shoben, Edward  
Sprague, Robert L.  
Srull, Thomas  
Swarr, Ralph R.  
Triandis, Harry C.  
Wasserman, Stanley  
Wickens, Christopher  
Wyer, Robert S., Jr.  
*Associate Professors*  
Asher, Steven R.  
Baillargeon, Renee  
Dell, Gary  
Drasgow, Fritz  
Fincham, Francis  
Fitzgerald, Louise  
Juraska, Janice  
Kramer, Arthur  
Miller, Gregory  
Ross, Brian  
Roy, Edward  
*Assistant Professors*  
Aber, Mark  
Banich, Marie  
Berenbaum, Howard  
Bockenholt, Ulf  
Bowman, Phillip  
Carnevale, Peter  
Cohen, Neal  
Dzhafarov, Ehtibar  
Fisher, Cynthia  
Garnsey, Susan  
Harpur, Timothy  
Heller, Wendy  
Lintern, Gaven  
Mandel, Ronald  
Miller, Kevin  
Rhodes, Jean  
Sanderson, Penny  
Snizek, Janet  
Tanaka, Jeffrey

### **Program in the Study of Religion**

*Professors*  
Jones, Robert A.  
Porton, Gary G.  
Schoedel, William R.  
*Associate Professor*  
Shapiro, Michael  
*Assistant Professors*  
Gregory, Peter N.  
Hoffman-Ladd, Valerie J.  
McKim, Robert J.  
Pandharipande, Rajeshwari  
Pitard, Wayne

### **Department of Slavic Languages and Literatures**

*Professors*  
Bristol, Evelyn C.  
Friedberg, Maurice  
Pachmuss, Temira  
*Associate Professors*  
Dunatov, Rasio  
Gladney, Frank Y.  
Hill, Steven P.  
Tempest, Richard  
*Assistant Professor*  
Pervukhin, Natalia

### **Department of Sociology**

*Professors*  
Arabie, Phipps  
Bordua, David J.  
Burton, Orville V.  
Choldin, Harvey M.  
Denzin, Norman K.  
Gorecki, Jan  
Hargens, Lowell  
Jones, Robert A.  
Kluegel, James R.  
Mirowsky, John  
Reskin, Barbara  
Robinson, Jerry  
Ross, Catherine  
Spaeth, Joe L.  
Sudman, Seymour  
Van Es, J. C.  
*Associate Professors*  
Cockerham, William C.  
Flood, Ann B.  
Liebert, Roland J.  
McPhail, Clark  
Pickering, Andrew  
Sampson, Robert  
Sofranko, Andrew  
Solaun, Mauricio  
Southwood, Kenneth E.  
Stevens, Gillian  
Swicegood, C. Gray  
Trent, William  
Warnecke, Richard  
Wasserman, Stanley  
Wiley, Norbert F.



*Assistant Professors*

Britt, Chester  
Liao, Tim  
Martin, William

**Department of Spanish,  
Italian, and Portuguese  
Professors**

Blaylock, William C.  
Cassell, Anthony K.  
Garfield, Evelyn P.  
Lott, Robert E.  
Meehan, Thomas C.  
Porqueras, Alberto  
Schulman, Ivan A.

*Associate Professors*

Aiex, Anoar  
Borgeson, Paul W., Jr.  
Musumeci, Antonino  
VanPatten, Bill  
Wilcox, John

*Assistant Professors*

Delgado, Luisa-Elena  
Diaz-Balsera, Viviana  
Escobar, Anna Maria  
Hualde, Jose  
Lee, James F.  
Musumeci, Diane  
Sharpe-Valadares, Peggy

**Department of Speech  
Communication**

*Professors*

Andersen, Kenneth E.  
Clark, Ruth Anne  
Delia, Jesse G.  
Grossberg, Lawrence  
Kramarae, Cheris  
Maclay, Joanna H.

*Associate Professors*

Conley, Thomas M.  
Desser, David M.  
Hay, James W.  
O'Keefe, Barbara J.  
O'Keefe, Daniel J.  
Swanson, David L.  
Wenzel, Joseph W.

*Assistant Professors*

Contractor, Noshir  
Darling, Ann L.  
Dorfman, Marcy H.  
Gaonkar, Dilip P.  
Jasinski, James

**Department of Speech and  
Hearing Science**

*Professors*

Bilger, Robert C.  
Kim, Chin-Woo  
O'Neill, John J.  
Yairi, Ehud

*Associate Professors*

Erickson, Joan G.  
Johnson, Cynthia J.  
Kuehn, David P.  
O'Neill, Marlyn  
Simpson, Robert K.  
*Assistant Professors*  
Chambers, Ron D.  
Lansing, Charrisa  
Rowan, Lynne E.

**Department of Statistics  
Professors**

Bohrer, Robert E.  
Burkholder, Donald L.  
Joag-dev, Kumar  
Knight, Frank B.  
Marden, John I.  
Philipp, Walter  
Portnoy, Stephen L.  
Sacks, Jerome  
Stout, William F.  
Wasserman, Stanley  
*Associate Professors*  
Barron, Andrew R.  
Cox, Dennis D.  
Einmahl, Uwe  
Martinsek, Adam T.  
Monrad, Ditlev  
Simpson, Douglas G.

*Assistant Professors*

Alho, Juha M.  
Wu, Wei  
Ying, Zhiliang

**GRADUATE SCHOOL OF  
LIBRARY AND  
INFORMATION SCIENCE**

*Professors*

Davis, Charles H.  
Estabrook, Leigh S.  
Henderson, Kathryn Luther  
Krummel, Donald W.  
Lancaster, F. Wilfrid  
Richardson, Selma K.

*Associate Professors*

Smith, Linda C.  
Weech, Terry L.  
*Assistant Professors*  
Allen, Bryce  
Bradley, Johanna  
Dalrymple, Prudence  
Sutton, J. Brett  
*Adjunct Faculty and  
Departmental Affiliates*  
Brichford, Maynard  
Choldin, Mariana  
Schlipf, Fred  
Stenstrom, Pat  
Williams, Martha E.

**SCHOOL OF SOCIAL  
WORK**

*Professors*

Balgopal, Pallassana R.  
Meares, Paula  
Mech, Edmund V.

*Associate Professors*

Cowger, Charles  
Downing, Ruppert A.  
Gullerud, Ernest N.  
Kagle, Jill

Vattano, Anthony J.  
Weinberg, Nancy

*Assistant Professors*

Adamek, Margaret  
Gustavsson, Nora  
Halter, Anthony  
Kaplan, Mark  
Kopels, Sandra  
Reinardy, James  
Rycraft, Joan  
Wernet, Stephen

*Clinical Assistant Professor*

Sattazahn, David

*Lecturers*

DeRoos, Yosikazu  
Hartman, Janice

**COLLEGE OF  
VETERINARY  
MEDICINE**

**Department of Veterinary  
Biosciences**

*Professor*

Bevill, Richard F.  
Buck, William B.  
Davis, Lloyd E.  
Hansen, Larry G.  
Hixon, James E.  
Jackson, Gary L.  
Koritz, Gary D.  
Manohar, Murli  
Meerdink, Galvin L.  
McQueen, Ralph D.  
Taylor, Gale D.  
Tumbleson, Michael E.  
Twardock, A. Robert  
Wagner, William C.  
*Associate Professor*  
Beasley, Val R.  
Hassan, Aslam S.  
Holmes, Kenneth R.  
Jeffery, Elizabeth H.  
Pijanowski, Gerald J.  
Simon, Mark R.  
Smetzer, David L.

*Assistant Professor*

Abbott, Louise C.  
 Baskin, Arthur  
 BeVier, Gregg W.  
 Bunick, David  
 Chambers, Mark D.  
 Cooke, Paul S.  
 Eurell, Jo Ann C.  
 Eurell, Thomas E.  
 Hess, Rex A.  
 Iwamoto, Gary A.  
 Sherman, Gary B.

**Department of Veterinary  
 Clinical Medicine**

*Professor*

Baker, Gordon J.  
 Benson, G. John  
 Brodie, Bruce O.  
 Burke, Thomas J.  
 Helper, Lloyd C.  
 Lock, Theodore F.  
 Nelson, Dale R.  
 Ott, Randall S.  
 Parker, Alan J.  
 Small, Erwin  
 Smith, Charles W.  
 Thurmon, John C.  
 Troutt, H. Fred  
 Whitmore, Howard L.

*Associate Professor*

Bane, David P.  
 Campbell, Karen L.  
 DiPietro, Joseph A.  
 Goetz, Thomas E.  
 Johnson, Ann L.  
 Kneller, Stephen K.  
 Krawiec, Donald R.  
 Losonsky, John M.  
 McKiernan, Brendan C.  
 Paul, Allan J.  
 Scoggins, Ross D.  
 Tranquilli, William J.

*Assistant Professor*

Cloran, Jean A.  
 Dugan, Steven J.  
 Foreman, Jonathan H.  
 Gerding, Paul A.  
 Greenfield, Cathy Lee  
 Hall, William F.  
 Manfra, Sandra  
 McKenna, Donald J.  
 O'Keefe, Debra  
 Petersen, Gordon C.  
 Sisson, D. David

**Department of Veterinary  
 Pathobiology**

*Professor*

Biehl, Leroy G.  
 Dorner, Joseph L.

Haschek-Hock, Wanda M.

Reynolds, Harry A.  
 Segre, Diego  
 Smith, Ronald D.  
 Todd, Kenneth S.  
 Tripathy, Deoki N.  
 Valli, Victor E.  
*Associate Professor*  
 Bunte, Ralph  
 DoCampo, Roberto  
 Gelberg, Howard B.  
 Hahn, Edwin C.  
 Hoffmann, Walter E.  
 Isaacson, Richard  
 Kuhlenschmidt, Mark S.  
 Segre, Mariangela  
 Smith, Arnold R.  
 Whiteley, Herbert E.  
 Zachary, James F.  
*Assistant Professor*  
 Hungerford, Laura L.  
 Kakoma, Ibulaimu  
 Kitron, Uriel D.  
 McLaughlin, Gerald L.  
 Sanecki, Robin K.  
 Scherba, Gail  
 Shapiro, Stuart Z.  
 Stahl, David A.  
 Vimr, Eric R.  
 Wallig, Matthew A.



## Appendix C

### Rubric Abbreviations Used in Curricular Listings (by abbreviation)

Following is a list of official rubric abbreviations for courses currently approved for offering on the Urbana-Champaign campus of the University of Illinois.

A A E	AERONAUTICAL AND ASTRONAUTICAL ENGINEERING
ACCY	ACCOUNTANCY
ADV	ADVERTISING
AFAS	AIR FORCE AEROSPACE STUDIES
AFLNG	AFRICAN LANGUAGES
AFRO	AFRO-AMERICAN STUDIES
AFRST	AFRICAN STUDIES
AGCOM	AGRICULTURAL COMMUNICATIONS
AG E	AGRICULTURAL ENGINEERING
AG EC	AGRICULTURAL ECONOMICS
AG M	AGRICULTURAL MECHANIZATION
AGR	AGRICULTURE
AGRON	AGRONOMY
AHCE	ADMINISTRATION, HIGHER, AND CONTINUING EDUCATION
ANSCI	ANIMAL SCIENCES
ANTH	ANTHROPOLOGY
ARAB	ARABIC
ARCH	ARCHITECTURE
ART&D	INTRODUCTION TO ART AND DESIGN
ARTCI	CINEMATOGRAPHY
ARTCR	CRAFTS
ARTED	ART EDUCATION
ARTGD	GRAPHIC DESIGN
ARTGP	GENERAL PROFESSIONAL COURSES IN ART AND DESIGN
ARTHI	HISTORY OF ART
ARTID	INDUSTRIAL DESIGN
ARTPA	PAINTING
ARTPH	PHOTOGRAPHY
ARTPR	PRINTING
ARTSC	SCULPTURE
AS ST	ASIAN STUDIES
ASTR	ASTRONOMY
ATMOS	ATMOSPHERIC SCIENCES
AVI	AVIATION
B ADM	BUSINESS ADMINISTRATION
B&T W	BUSINESS AND TECHNICAL WRITING
BIOCH	BIOCHEMISTRY
BIOEN	BIOENGINEERING
BIOL	BIOLOGY
BIOPH	BIOPHYSICS
BR	BRIDGE PROGRAM
BULG	BULGARIAN
BUS	BUSINESS
C&I	CURRICULUM AND INSTRUCTION
CATAL	CATALAN
C E	CIVIL ENGINEERING
CER E	CERAMIC ENGINEERING
CH E	CHEMICAL ENGINEERING
CHEM	CHEMISTRY
CHIN	CHINESE
CLCIV	CLASSICAL CIVILIZATION
C LIT	COMPARATIVE LITERATURE

COMM	COMMUNICATIONS
COP	COPTIC
C S	COMPUTER SCIENCE
CSB	CELL AND STRUCTURAL BIOLOGY
CZECH	CZECH
DANCE	DANCE
ECE	ELECTRICAL AND COMPUTER ENGINEERING
ECON	ECONOMICS
ED PR	EDUCATIONAL PRACTICE
EDPSY	EDUCATIONAL PSYCHOLOGY
EDUC	EDUCATION
EEE	ECOLOGY, ETHOLOGY, AND EVOLUTION
E I L	ENGLISH AS AN INTERNATIONAL LANGUAGE
ENG	ENGINEERING
ENG H	ENGINEERING HONORS
ENGL	ENGLISH
ENTOM	ENTOMOLOGY
ENVST	ENVIRONMENTAL STUDIES
E P S	EDUCATIONAL POLICY STUDIES
E S L	ENGLISH AS A SECOND LANGUAGE
F A A	FINE AND APPLIED ARTS
FACE	FAMILY AND CONSUMER ECONOMICS
FIN	FINANCE
F N	FOODS AND NUTRITION
FOR	FORESTRY
FR	FRENCH
F S	FOOD SCIENCE
G & D	GENETICS AND DEVELOPMENT
G E	GENERAL ENGINEERING
GEOG	GEOGRAPHY
GEOL	GEOLOGY
GER	GERMAN
GMC	GERMANIC
GRK	GREEK
HDFS	HUMAN DEVELOPMENT AND FAMILY STUDIES
HEBR	HEBREW
HINDI	HINDI
HIST	HISTORY
HORT	HORTICULTURE
HRFS	HUMAN RESOURCES AND FAMILY STUDIES
HSS	HEALTH AND SAFETY STUDIES
HUMAN	HUMANITIES
I D	INTERIOR DESIGN
I E	INDUSTRIAL ENGINEERING
ITAL	ITALIAN
JAPAN	JAPANESE
JOURN	JOURNALISM
KINES	KINESIOLOGY
KOREA	KOREAN
L A	LANDSCAPE ARCHITECTURE
L A S	LIBERAL ARTS AND SCIENCES
LA ST	LATIN AMERICAN AND CARIBBEAN STUDIES
LAT	LATIN
LAW	LAW
LEIST	LEISURE STUDIES
LING	LINGUISTICS
L I R	LABOR AND INDUSTRIAL RELATIONS
LIS	LIBRARY AND INFORMATION SCIENCE
MATH	MATHEMATICS
MATSE	MATERIALS SCIENCE AND ENGINEERING



MCBIO	MICROBIOLOGY
M E	MECHANICAL ENGINEERING
MED S	MEDICAL SCIENCES
MET E	METALLURGICAL ENGINEERING
MFG E	MANUFACTURING ENGINEERING
MIL S	MILITARY SCIENCE
MIN E	MINING ENGINEERING
MUSIC	MUSIC
NA	MEDICAL-SURGICAL NURSING
ND	PSYCHIATRIC NURSING
NE	PUBLIC HEALTH NURSING
NF	ADMINISTRATIVE STUDIES
NP	MATERNAL-CHILD NURSING
NS	GENERAL NURSING
N S	NAVAL SCIENCE
NUC E	NUCLEAR ENGINEERING
NUTRS	NUTRITIONAL SCIENCES
PERS	PERSIAN
PHIL	PHILOSOPHY
PHYCS	PHYSICS
PHYSL	PHYSIOLOGY
PLBIO	PLANT BIOLOGY
PL PA	PLANT PATHOLOGY
POL	POLISH
POL S	POLITICAL SCIENCE
PORT	PORTUGUESE
PSYCH	PSYCHOLOGY
REHAB	REHABILITATION EDUCATION
RELST	RELIGIOUS STUDIES
RHET	RHETORIC AND COMPOSITION
RMLNG	ROMANCE LINGUISTICS
R SOC	RURAL SOCIOLOGY
R TV	RADIO AND TELEVISION
RUSS	RUSSIAN
SANSK	SANSKRIT
SCAN	SCANDINAVIAN
S CR	SERBO-CROATIAN
SLAV	SLAVIC
SOC	SOCIOLOGY
SOC S	SOCIAL SCIENCE
SOC W	SOCIAL WORK
SOILS	SOILS
SPAN	SPANISH
SPCOM	SPEECH COMMUNICATION
SP ED	SPECIAL EDUCATION
SPSHS	SPEECH AND HEARING SCIENCE
STAT	STATISTICS
STS	SCIENCE, TECHNOLOGY, AND SOCIETY
T A	TEXTILES AND APPAREL
T A M	THEORETICAL AND APPLIED MECHANICS
THEAT	THEATRE
UKR	UKRAINIAN
U P	URBAN AND REGIONAL PLANNING
V B	VETERINARY BIOSCIENCES
V C M	VETERINARY CLINICAL MEDICINE
V M S	VETERINARY MEDICAL SCIENCE
VP	VETERINARY PATHOBIOLOGY
VOTEC	VOCATIONAL AND TECHNICAL EDUCATION
W S	WOMEN'S STUDIES

**Rubric Abbreviations Used in Curricular Listings**  
**(by subject area)**

Following is a list of official rubric abbreviations for courses currently approved for offering on the Urbana-Champaign campus of the University of Illinois.

ACCOUNTANCY	ACCY
ADMINISTRATION, HIGHER, AND CONTINUING EDUCATION	AHCE
ADMINISTRATIVE STUDIES ( <i>NURSING</i> )	NF
ADVERTISING	ADV
AERONAUTICAL AND ASTRONAUTICAL ENGINEERING	A A E
AFRICAN LANGUAGES	AFLNG
AFRICAN STUDIES	AFRST
AFRO-AMERICAN STUDIES	AFRO
AGRICULTURAL COMMUNICATIONS	AGCOM
AGRICULTURAL ECONOMICS	AG EC
AGRICULTURAL ENGINEERING	AG E
AGRICULTURAL MECHANIZATION	AG M
AGRICULTURE	AGR
AGRONOMY	AGRON
AIR FORCE AEROSPACE STUDIES	AFAS
ANIMAL SCIENCES	ANSCI
ANTHROPOLOGY	ANTH
ARABIC	ARAB
ARCHITECTURE	ARCH
ART EDUCATION	ARTED
ASIAN STUDIES	AS ST
ASTRONOMY	ASTR
ATMOSPHERIC SCIENCES	ATMOS
AVIATION	AVI
BIOCHEMISTRY	BIOCH
BIOENGINEERING	BIOEN
BIOLOGY	BIOL
BIOPHYSICS	BIOPH
BRIDGE PROGRAM	BR
BULGARIAN	BULG
BUSINESS	BUS
BUSINESS ADMINISTRATION	B ADM
BUSINESS AND TECHNICAL WRITING	B&T W
CATALAN	CATAL
CELL AND STRUCTURAL BIOLOGY	CSB
CERAMIC ENGINEERING	CER E
CHEMICAL ENGINEERING	CH E
CHEMISTRY	CHEM
CHINESE	CHIN
CINEMATOGRAPHY	ARTCI
CIVIL ENGINEERING	C E
CLASSICAL CIVILIZATION	CLCIV
COMMUNICATIONS	COMM
COMPARATIVE LITERATURE	C LIT
COMPUTER SCIENCE	C S
COPTIC	COP
CRAFTS	ARTCR
CURRICULUM AND INSTRUCTION	C&I
CZECH	CZECH
DANCE	DANCE
ECOLOGY, ETHOLOGY, AND EVOLUTION	EEE
ECONOMICS	ECON



EDUCATION	EDUC
EDUCATIONAL POLICY STUDIES	E P S
EDUCATIONAL PRACTICE	ED PR
EDUCATIONAL PSYCHOLOGY	EDPSY
ELECTRICAL AND COMPUTER ENGINEERING	ECE
ENGINEERING	ENG
ENGINEERING HONORS	ENG H
ENGLISH AS A SECOND LANGUAGE	E S L
ENGLISH AS AN INTERNATIONAL LANGUAGE	E I L
ENGLISH	ENGL
ENTOMOLOGY	ENTOM
ENVIRONMENTAL STUDIES	ENVST
FAMILY AND CONSUMER ECONOMICS	FACE
FINANCE	FIN
FINE AND APPLIED ARTS	F A A
FOOD SCIENCE	F S
FOODS AND NUTRITION	F N
FORESTRY	FOR
FRENCH	FR
GENERAL ENGINEERING	G E
GENERAL NURSING	NS
GENERAL PROFESSIONAL COURSES IN ART AND DESIGN	ARTGP
GENETICS AND DEVELOPMENT	G & D
GEOGRAPHY	GEOG
GEOLOGY	GEOL
GERMAN	GER
GERMANIC	GMC
GRAPHIC DESIGN	ARTGD
GREEK	GRK
HEALTH AND SAFETY STUDIES	HSS
HEBREW	HEBR
HINDI	HINDI
HISTORY	HIST
HISTORY OF ART	ARTHI
HORTICULTURE	HORT
HUMAN DEVELOPMENT AND FAMILY STUDIES	HDFS
HUMAN RESOURCES AND FAMILY STUDIES	HRFS
HUMANITIES	HUMAN
INDUSTRIAL DESIGN	ARTID
INDUSTRIAL ENGINEERING	I E
INTERIOR DESIGN	I D
INTRODUCTION TO ART AND DESIGN	ART&D
ITALIAN	ITAL
JAPANESE	JAPAN
JOURNALISM	JOURN
KINESIOLOGY	KINES
KOREAN	KOREA
LABOR AND INDUSTRIAL RELATIONS	L I R
LANDSCAPE ARCHITECTURE	L A
LATIN	LAT
LATIN AMERICAN AND CARIBBEAN STUDIES	LA ST
LAW	LAW
LEISURE STUDIES	LEIST
LIBERAL ARTS AND SCIENCES	L A S
LIBRARY AND INFORMATION SCIENCE	LIS
LINGUISTICS	LING
MANUFACTURING ENGINEERING	MFG E
MATERIALS SCIENCE AND ENGINEERING	MATSE
MATERNAL-CHILD NURSING	NP
MATHEMATICS	MATH

MECHANICAL ENGINEERING	M E
MEDICAL SCIENCES	MED S
MEDICAL-SURGICAL NURSING	NA
METALLURGICAL ENGINEERING	MET E
MICROBIOLOGY	MCBIO
MILITARY SCIENCE	MIL S
MINING ENGINEERING	MIN E
MUSIC	MUSIC
NAVAL SCIENCE	N S
NUCLEAR ENGINEERING	NUC E
NUTRITIONAL SCIENCES	NUTRS
PAINTING	ARTPA
PERSIAN	PERS
PHILOSOPHY	PHIL
PHOTOGRAPHY	ARTPH
PHYSICS	PHYCS
PHYSIOLOGY	PHYSL
PLANT BIOLOGY	PLBIO
PLANT PATHOLOGY	PL PA
POLISH	POL
POLITICAL SCIENCE	POL S
PORTUGUESE	PORT
PRINTING	ARTPR
PSYCHIATRIC NURSING	ND
PSYCHOLOGY	PSYCH
PUBLIC HEALTH NURSING	NE
RADIO AND TELEVISION	R TV
REHABILITATION EDUCATION	REHAB
RELIGIOUS STUDIES	RELST
RHETORIC AND COMPOSITION	RHET
ROMANCE LINGUISTICS	RMLNG
RURAL SOCIOLOGY	R SOC
RUSSIAN	RUSS
SANSKRIT	SANSK
SCANDINAVIAN	SCAN
SCIENCE, TECHNOLOGY, AND SOCIETY	STS
SCULPTURE	ARTSC
SERBO-CROATIAN	S CR
SLAVIC	SLAV
SOCIAL SCIENCE	SOC S
SOCIAL WORK	SOC W
SOCIOLOGY	SOC
SOILS	SOILS
SPANISH	SPAN
SPECIAL EDUCATION	SP ED
SPEECH AND HEARING SCIENCE	SPSHS
SPEECH COMMUNICATION	SPCOM
STATISTICS	STAT
TEXTILES AND APPAREL	T A
THEATRE	THEAT
THEORETICAL AND APPLIED MECHANICS	T A M
UKRAINIAN	UKR
URBAN AND REGIONAL PLANNING	U P
VETERINARY BIOSCIENCES	V B
VETERINARY CLINICAL MEDICINE	V C M
VETERINARY MEDICAL SCIENCE	V M S
VETERINARY PATHOBIOLOGY	VP
VOCATIONAL AND TECHNICAL EDUCATION	VOTEC
WOMEN'S STUDIES	W S



## Appendix D: University of Illinois Regulations Governing the Determination of Residence Status for Admission and Assessment of Student Tuition

**May 1987**

For the purpose of these regulations, an “adult” is considered to be a student eighteen years of age or over; a “minor” student is a student under eighteen years of age. The term “the State” means the State of Illinois. Except for those exceptions clearly indicated in these Regulations, in all cases where records establish that the person does not meet the requirements for Resident status as defined in these Regulations the Nonresident status shall be assigned.

### 1. Residence Determination

Evidence for determination of residence status of each applicant for admission to the University shall be submitted to the Director of Admissions and Records at the time of application for admission. A student may be reclassified at any time by the University upon the basis of additional or changed information. However, if the student is classified in error as a Resident student, the change in tuition shall be applicable beginning with the term following the reclassification; if the student is classified in error as a Nonresident, the change in tuition shall be applicable to the term in which the reclassification occurs, provided the student has filed a written request for a review in accordance with these regulations.

### 2. Adult Student

An adult, to be considered a Resident for purposes of admission, must have been a bona fide resident of the State for a period of at least six consecutive months immediately preceding the date of receipt of the application for admission. An adult, to be considered a Resident for purposes of assessment of student tuition, must have been a bona fide resident of the State for a period of at least six consecutive months immediately preceding the beginning of any term for which the adult registers at the University, and must continue to maintain a bona fide residence in the State. An adult whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the State and who resides with them (or the one residing in the State) or elsewhere in the State will be regarded as a Resident applicant or student.

### 3. Minor Student

The residence of a minor shall be considered to be, and to change with and follow:

- a. That of the parents, if they are living together, or living parent, if one is dead; or
- b. If the parents are separated or divorced, that of the parent to whom the custody of the person has been awarded by court decree or order, or, in the absence of a court decree or order, that of the father unless the person has continuously resided with the mother for a period of at least six consecutive months immediately preceding registration at the University, in which latter event the residence shall be considered to be that of the mother; or
- c. That of the adoptive parents, if the person has been legally adopted and, in the event the adoptive parents become divorced or separated, that of the adoptive parent whose residence would govern under the foregoing rules if that parent had been a natural parent; or
- d. That of the legally appointed guardian of the person; or
- e. That of a “natural” guardian, such as a grandparent, adult brother or adult sister, adult uncle or aunt, or other adult with whom the person has resided and has been supported by for a period of at least six consecutive months immediately preceding registration at the University for any term if the person’s parents are dead or the person has been abandoned and if no legal guardian of the person has been appointed and qualified.

### 4. Parent or Guardian

Except as provided in paragraph 10 of these Regulations, no parent or legal or natural guardian will be considered a resident of the State unless that person (a) maintains a bona fide and permanent place of abode within the State, and (b) lives, except when temporarily absent from the State with no intention of changing legal residence to some other state or country, within the State.

**5. Emancipated Minor**

A minor who has been emancipated, is completely self-supporting, and actually resides in the State shall be considered to be a Resident even though the parents or guardian may reside outside the State. An emancipated minor who is completely self-supporting shall be considered to "actually reside in the State of Illinois" if the minor has maintained a dwelling place within the State uninterruptedly for a period of at least six consecutive months immediately preceding the beginning of any term for which the minor registers at the University. Marriage or active military service shall be regarded as effecting the emancipation of minors, whether male or female, for the purposes of this regulation. An emancipated minor whose parents (or one of them if only one parent is living or the parents are separated or divorced) have established and are maintaining a bona fide residence in the State and who resides with them (or the one residing in the State) or elsewhere in the State will be regarded as a Resident student.

**6. Persons Without United States Citizenship**

A person who is not a citizen of the United States of America who meets and complies with all of the other applicable requirements of these regulations may establish residence status unless the person holds a visa which on its face precludes an intent to reside in the United States.

**7. Married Student**

A Nonresident student who is a citizen of the United States of America or a person who may establish residence status under section 6 of these Regulations and who is married to a person who meets and complies with all of the applicable requirements of these Regulations to establish resident status shall be classified as a Resident.

**8. Armed Forces Personnel**

A person who is actively serving in one of the Armed Forces of the United States and who is stationed and present in the State in connection with that service and submits evidence of such service and station, and the person's spouse and dependent children, shall receive waiver of the Nonresident portion of tuition as long as the person remains stationed and present in Illinois and the spouse or dependent children also live in the State.

**9. Minor Children of Parents Transferred Outside the United States**

The minor children of persons who have resided in the State for at least six consecutive months immediately prior to a transfer by their employers to some location outside the United States shall be considered Residents. However, this shall apply only when the minor children of such parents enroll in the University within five years from the time their parents are transferred by their employer to some location outside the United States.

**10. Staff Members of the University and of Allied Agencies, and Faculties of State-Supported Institutions of Higher Education in Illinois**

Staff members of the University and of allied agencies, and faculties of state-supported institutions of higher education in Illinois, holding appointment of at least one-quarter time, and their spouses and dependent children, shall be treated as Residents.

**11. Teachers in Private and Public Schools in Illinois**

Teachers in the private and public elementary and secondary schools in Illinois shall, if subject to the payment of tuition, be assessed at the Resident rate during the term in which the staff member or teacher holds such an appointment at least one-quarter time. This privilege also extends to the summer session or off-quarter vacation immediately following the term for which such appointment was effective. Any Nonresident student who qualifies for resident tuition by reason of an appointment described in 10 or 11 above shall become subject to nonresident tuition for the entire term if the appointment qualifying the student for the resident benefit is vacated prior to completion of three-fourths of the term in question. Resignation or cancellation of the appointment prior to the close of the spring term also cancels the eligibility for the resident tuition privilege in the following summer or Off-Quarter Vacation Term.

**12. Definition of Terminology**

To the extent that the terms "bona fide residence," "independent," "dependent," and "emancipation" are not defined in these Regulations, definitions shall be determined by according due consideration to all of the facts pertinent and material to the question and to the applicable laws and court decisions of the State of Illinois.



Voter registration, filing of taxes, proper license and registration for the driving or ownership of a vehicle, and other such transactions may verify intent of residence in a state. Neither length of University attendance nor continued presence in the University community during vacation period shall be construed to be proof of Illinois residence.

The term "staff member" as used in these regulations shall mean a person appointed to an established position for a specific amount of time, at a salary commensurate with the percentage of time required, under an appointment requiring service for not less than three-fourths of the term. The term "staff member" as defined herein shall not apply to persons employed on an hourly basis in either an academic or nonacademic capacity, nor to persons on leave without pay. Persons appointed to established Civil Service positions whose rate of pay is determined by negotiation or prevailing rates shall not be considered as being paid on an hourly basis.

### **13. Procedure for Review of Residence Status and/or Tuition Assessment**

A student who takes exception to the residence status assigned and/or tuition assessed shall pay the tuition assessed but may file a claim in writing to the Director of Admissions and Records for a reconsideration of residence status and/or an adjustment of the tuition assessed. For purposes of admission, the written claim must be filed within twenty calendar days from the date of notification of residence status. For purposes of assessment of tuition, the written claim must be filed within twenty days of the date of assessment of tuition or the date designated in the official University calendar as that upon which instruction begins for the academic period for which the tuition is payable, whichever is later. Students who file after the twenty-day period lose all rights to change of status and/or adjustment of the tuition assessed for the term in question. If the student is dissatisfied with the ruling in response to the written claim made within said period, the student may appeal the ruling to the Director, University Office of School and College Relations, by filing with the Director of Admissions and Records within twenty days of the notice of the ruling a written request. If such a written request is filed within said period, the question of residence status under the provisions of these Regulations and of applicable laws shall be referred by the Director of Admissions and Records to the Director, University Office of School and College Relations, whose decision shall be final.

These regulations shall remain in full force and effect unless and until subsequently amended or repealed by action of the Board of Trustees.

Further information or clarification may be secured by contacting the Director of Admissions and Records on the campus concerned:

University of Illinois at Urbana-Champaign  
10 Henry Administration Building  
506 South Wright Street  
Urbana, IL 61801

University of Illinois at Chicago  
P.O. Box 4348  
Chicago, IL 60680

University of Illinois at Chicago  
Health Sciences Center  
P.O. Box 6998  
Chicago, IL 60680

## INDEX

- Abbreviations, course, 357
- Academic calendar, 4, 5
- Academic advising, freshmen, 28
- Accountancy
  - curriculum, 147
  - teacher education minor, 150
- Accounting science/LAS joint degree program, 323
- Acting, professional studio, 235
- Activities, student, 4
- Actuarial science, 280
- Admission requirements
  - Additional for some colleges, 14
  - Agriculture, 97
  - Applied Life Studies, 130
  - Aviation, 140
  - Commerce and Business Administration, 143
  - Communications, 152
  - Education, 159
  - Engineering, 175
  - general, 11
  - LAS, 242
  - Social Work, 331
  - Veterinary Medicine, 334
- Admission, 9-27
  - age, 11
  - application calendars, 16, 18, 24
  - application documents, 17, 21, 25
  - beginning freshmen, 15
  - categories, 10
  - college preparatory subject requirements, 12
  - correspondence courses, 23
  - delayed, 41
  - denial because of misconduct, 10
  - early, 41
  - English competence, 24, 76
  - foreign applicants, 23
  - General Education Development Test (GED), 12
  - general requirements, 11
  - health requirements, 15
  - high school credits, 12
  - high school graduation, 12
  - intersession, 27
  - listeners, 23
  - nondegree applicants, 22
  - readmission applicants, 10, 21
  - residence classification, 49
  - second bachelor's degree applicants, 11, 22
  - special, 11
  - study opportunities, undergraduate, 9
  - subject requirement patterns, 12, 13
  - summer session, 25
  - teacher education, 87
  - test information for beginning freshmen, 17
  - tests for beginning freshmen, 27
  - transfer applicants, 10, 17
  - tuberculosis control, 15
  - visitors, 23
- Adult and continuing education minor, 166
- Advance enrollment, freshmen, 28
- Advanced placement program, 30
- Advanced ROTC/engineering program, 182
- Advertising, 154
- Aeronautical and astronautical engineering, 186
- African Studies, 247
  - interdisciplinary minor in, 297
- Afro-American Academic Program, 248
- Afro-American studies, 248
  - interdisciplinary minor in, 297
- Age, admission requirement, 11
- Agricultural communications, 106
- Agricultural economics, 100
- Agricultural education, 108
- Agricultural engineering, 108, 187
- Agricultural mechanization, 101
- Agricultural science, 110
- Agricultural science/agricultural engineering program, 111
- Agriculture, College of, 95
  - academic progress statement, 98
  - admission requirements, 97
  - agricultural communications, 106
  - agricultural economics, 100
  - agricultural education, 108
  - agricultural engineering, 108, 187
  - agricultural mechanization, 101
  - agricultural science, 110
  - agricultural science/agricultural engineering program, 111
  - agronomy, 103
  - animal sciences, 104
  - core curriculum, 99
  - course placement, 98
  - curricula, 99
  - departments, 96
  - facilities, 95
  - food industry, 113
  - food science, 113
  - forestry, 114
  - general agriculture, 105
  - general education requirements, 98
  - graduation requirements, 98
  - home economics education, vocational, 126
  - home economics, see human resources and family studies
  - human resources and family studies, 97, 118
  - ornamental horticulture, 116
  - restaurant management, 124
  - scholarships, 97
  - soil science, 117
  - veterinary medicine preprofessional, 118



- Agriculture core curriculum, 99
  - agricultural economics, 100
  - agricultural mechanization, 101
  - agronomy, 103
  - animal sciences, 104
  - general agriculture, 105
  - horticulture, 106
- Agronomy, 103
- Air Force ROTC, 84
- Aircraft maintenance technology curriculum, 141
- American civilization option, 268
- Animal sciences, 104
- Anthropology, 254, 293
- Application deadlines
  - financial aid, 61
  - foreign students, 24
  - freshmen, beginning, 16
  - transfer applicants, 18
- Application documents
  - foreign applicants, 25
  - freshmen applicants, 17
  - readmission, 21
  - summer session, nondegree applicants, 27
  - transfer applicants, 21
- Application fee, 52
- Application fee, exemptions and waivers, 51
- Application process, financial aid, 60
- Applied Life Studies, College of, 129
  - admission requirements, 130
  - curricula, 131
  - degrees awarded, 129
  - departments, 129
  - health and safety studies, 129, 131
  - health education, teacher education minor, 133
  - honors program, 131
  - kinesiology, 129, 133
  - leisure studies, 130, 136
  - physical education, teacher education minor, 136
  - rehabilitation-education services, 129
- Applied theatre, 234
- Architecture, 214
- Armed services credit, graduation requirement, 77
- Army ROTC, 80
- Art and Design, School of, 216
  - advanced placement, 31
  - art education, 217
  - art education, teacher education minor, 218
  - crafts, 219
  - graphic design, 219
  - history of art, 220
  - industrial design, 220
  - painting, 221
  - photography, 222
  - portfolio, 217
  - sculpture, 223
- Art education, 217
- Art history, see history of art
- Art history (LAS), 254
- Asian studies, 255
- Assembly Hall, 3
- Astronomy, 256
- Athletics, intercollegiate, 4
- Austria, Year Abroad Program in, 246
- Aviation, Institute of, 140
  - admission requirements, 140
  - aircraft maintenance technology, 141
  - curricula, 141
  - flight training, 140
  - flight training fees, 140
  - general education requirements, 140
  - professional pilot, 141
  - professional pilot/aircraft maintenance technology, 142
- Bachelor's degrees, graduation requirements, 72
- Background statement, freshmen applicants, 17
- Beckman Institute, 3
- Beginning freshman admission, 10, 15
- Bicycles, 71
- Biochemistry, specialized curriculum, 299
- Bioengineering options, 179, 272
- Biology, 273
  - teacher education minor, 321
  - teaching of, 305
- Biophysics option, 274
- Bioscience, 134
- Board of Trustees, iv
- Broadcast journalism sequence, 155
- Business administration, 147
- Business administration/LAS joint degree program, 323
- Business education, 166
- Calendars
  - academic, 4, 5
  - application, 16, 18, 23
- Campus, 2
- Campus Honors Program, 35
- Campus Visitors Center, 4
- Career services, 44
- Cell and structural biology, 275
- Ceramic engineering, 190
- Certificates, graduation requirements, 72
- Certification, teacher education, 87
  - general requirements, 90
- Charges, as visitor, 23
- Chemical engineering, 299
- Chemistry
  - Cooperative Program in, 256
  - major, 256
  - minor, 293
  - specialized curriculum, 301
  - teacher education minor, 321
  - teaching of, 306

- Cinema studies, 268, 293
  - teacher education minor, 322
- Civil engineering, 191
- Class size, 3
- Classics, 257, 294
- Classification of students, 69
- Cohn Scholar Program, 244
- College-Level Examination Program (CLEP), 34
- College Work-Study, 62
- Colleges and schools, 2
- Combined programs
  - LAS/Commerce, 245
  - LAS/Engineering, 245
- Commerce and Business Administration, College of, 143
  - accountancy, 147
  - admission requirements, 143
  - business administration, 147
  - curricula, 143, 145
  - departments, 143
  - economics, 149
  - finance, 150
  - general education sequence requirements, 144
  - graduation requirements, 144
  - honors at graduation, 144
  - honors programs, 144
  - mathematics placement test, 143
  - mathematics requirement, 145
  - residency requirement, 146
  - teacher education minors, 150
- Communications, College of, 151
  - admission requirements, 152
  - advertising, 154
  - broadcast journalism sequence, 155
  - curricula, 151, 154
  - Dean's List, 153
  - degrees awarded, 151
  - departments, 151
  - facilities, 151
  - general education requirements, 154
  - graduation requirements, 153
  - honors at graduation, 153
  - honors programs, 152
  - human resources and family studies minor, 157
  - James Scholars, 152
  - journalism, 155
  - Kappa Tau Alpha, 153
  - library, 151
  - media studies, 156
  - minors, 157
  - news-editorial sequence, 155
  - teacher education minor in journalism, 157
- Community health education, 132
- Comparative literature, 258
- Computer engineering, 194
- Computer science
  - advanced placement, 31
  - engineering curriculum, 195
  - major, 258
  - minor, 294
  - teacher education minor, 320
  - teaching of, 307
- Computers, education minor, 166
- Concurrent enrollment, 41
- Consumer economics option, 119
- Cooperative Engineering Education Program, 179
- Cooperative Program in Chemistry, 256
- Correspondence courses, 23
  - graduation requirements, 77
- Costs, 48
- Counseling Center, 43, 44, 45
- Course abbreviations, 357
- Courses, 3
- Crafts, 219
- Credit-no credit grading option, 68
- Dance, 224
- Dean of Students, 43
- Dean's List, 78
- Deans and directors, 338
- Debt to University, 71
- Delayed admission, 41
- Denial of admission, readmission, 10
- Dentistry, LAS preprofessional requirements, 325
- Dietetics, 120
- Disabled, physically, services for, 2, 40
- Disabilities, teaching persons with, 172
- Early admission program, 41
- Early childhood education, 168
- Earth science
  - teacher education minor, 321
  - teaching of, 308
- East Asian and Pacific Studies, see Asian studies
- Ecology, ethology, and evolution, 276
- Economics
  - advanced placement, 31
  - commerce curriculum, 149
  - education, teacher education minor, 150
  - LAS major, 259
- Education, College of, 158
  - admission requirements, 159
  - adult and continuing education, teacher education minor, 166
  - business education, 166
  - computers minor, 166
  - curricula, 160
  - departments, 158
  - disabilities, teaching of persons with moderate to severe, 172
  - early childhood education, 168
  - education general, 160



- elementary education semester in England, 159
  - elementary school teaching, 169
  - general education requirements, 160
  - graduation requirements, 160
  - high school teaching, 161
  - honors at graduation, 159
  - honors programs, 159
  - James Scholars, 159
  - technical education specialties, 170
- Education general, 160
- Educational Opportunities Program (EOP), 39, 44
- Electrical engineering, 196
- Elementary education semester in England, 159
- Elementary school teaching, 169
- Emergency loans, 66
- Employment, student, 62
- Engineering, College of, 174
  - admission requirements, 175
  - advanced ROTC training/engineering program, 182
  - aeronautical and astronautical engineering, 186
  - affiliations with liberal arts colleges, 178
  - agricultural engineering, 187
  - bioengineering option, 179
  - ceramic engineering, 190
  - civil engineering, 191
  - computer engineering, 194
  - computer science, 195
  - Cooperative Engineering Education Program, 179
  - curricula, 186
  - departments, 174
  - electives, 184
  - electrical engineering, 196
  - engineering/LAS program, 177
  - engineering mechanics, 198
  - engineering physics, 200
  - general education requirements, 176
  - general engineering, 201
  - honors at graduation, 184
  - honors programs, 184
  - industrial engineering, 204
  - international opportunities, 182
  - James Scholars, 184
  - liberal arts colleges, affiliations with other, 178
  - library, 174
  - manufacturing engineering option, 181
  - mechanical engineering, 205
  - metallurgical engineering, 206
  - nuclear engineering, 207
  - polymer science/engineering option, 180
  - ROTC training combined with engineering, 182
  - special programs, 177
  - Tau Beta Pi, 184
- Engineering/LAS program, 177
- Engineering mechanics, 198
- Engineering physics, 200
- English
  - advanced placement, 31
  - competence, 24, 76
  - composition requirement in LAS, 250
  - education specialty, 161
  - graduation requirement, 76
  - major, 260
  - minor, 294
  - teacher education minor, 318
  - teaching of, 309
- English as a Second Language, teacher education minor, 318
- Enrollment considerations, undergraduate, 9
- Enrollment guidelines, visitors, 23
- Entomology, 276
- Examinations, proficiency, 34
- Exemptions and waivers, tuition and fee, 51
- Expenses, student, 48
- Extramural courses, 23, 75
- Facilities, 3
- Faculty, 3, 339
- Falsification of documents, 70
- Family housing, student, 47
- Fees, 48
  - exemptions and waivers, 51
  - installment plan, 50
- Finance
  - commerce curriculum, 150
  - LAS major, 261
- Financial aid, 44, 60
  - address, 60
  - application dates, 61
  - application process, 60
  - college work-study, 62
  - emergency loans, 66
  - employment, 62
  - federal and state grant programs, 61
  - grants, 62
  - loans, 62, 66
  - need analysis document, 60
  - readmitted students, 60
  - scholarships, 61, 65
  - sources of, 61
  - specialized aid, 64
  - transfer students, 60
  - veterans, 64
  - work-study, 62
- Financial verification, foreign applicants, 25
- Fine and Applied Arts, College of, 209
  - architecture, 214
  - art and design, 216
  - art education, 217
  - art history, see history of art
  - crafts, 219
  - curricula, 210
  - dance, 224
  - departments, 210
  - electives, 211, 214

- facilities, 209
- general education requirements, 211
- general education sequence requirements, 211
- graduation requirements, 211
- graphic design, 219
- history of art, 220
- honors at graduation, 211
- honors program, 211
- individual study programs, 210
- industrial design, 220
- Krannert Art Museum and Kinkead Pavilion, 209
- Krannert Center for the Performing Arts, 210
- landscape architecture, 226
- libraries, 210
- music, 227
- music education, 233
- painting, 221
- performance organizations, 210
- photography, 222
- sculpture, 223
- special programs, 210
- study abroad, 211
- theatre, 234
- urban and regional planning, 237
- urban studies, teacher education minor, 239
- Flight training, 140
- Flight training fees, 49, 140
- Food industry, 113
- Food science, 113
- Food science option, forestry, 115
- Foods and nutrition, 121
- Foods in business, 121
- Foreign applicants, 23
  - admission requirements, 24
  - application calendar, 24
  - application documents, 25
  - English competence, 24
  - financial verification, 25
- Foreign language, graduation requirement, 76
- Foreign languages, advanced placement, 31
- Foreign languages, teacher education minors, 319
- Foreign languages, teaching of, 310
- Forest science, 115
- Forestry, 114
  - forest science option, 115
  - wood products industries option, 116
- France, Year Abroad Program in, 246
- Fraternities, 47
- French
  - major, 262
  - teacher education minor, 319
  - teaching of, 310
- Freshmen, beginning, 10, 15
  - academic advising, 28
  - admission requirements, 16
  - admission tests, 17
  - advance enrollment, 28
  - application calendar, 16
  - application documents, 17
  - background statement, 17
  - orientation, 28
  - placement testing, 28
  - precollege programs, 28
- General admission requirements, 11
- General agriculture, 105
- General education requirements, 76
- General engineering, 201
- General science
  - education specialty, 162
  - teacher education minor, 321
- Geography, 263
- Geology and geophysics, specialized curriculum, 301
- Geology, 264, 295
- German
  - teacher education minor, 319
  - teaching of, 311
- Germanic languages and literatures, 265
- Government, advanced placement, 32
- Grade-point, graduation requirements, 74
- Grading system, 67
  - classification of students, 69
  - credit-no credit option, 68
  - transcripts, 69
- Graduation requirements, 72
  - armed services credit, 77
  - bachelor's degrees, 72
  - certificates, 74
  - correspondence courses, 77
  - English, 76
  - extramural courses, 77
  - foreign language, 76
  - general education, 76
  - grade-point, 74
  - honors, 78
  - religious courses, 76
  - residence, 75
  - second bachelor's degree, 75
  - theses, 77
- Graduation with honors, 78
- Grants, 61
- Graphic design, 219
- Health and safety studies, 129, 131
  - community health education, 132
  - health planning and administration, 132
- Health center, 46
- Health education, teacher education minor, 133
- Health insurance, 57
  - exemptions and waivers, 57
- Health planning and administration, 132
- Health professions information, 44
- Health requirements, 15
- Health service fee, exemptions and waivers, 55



- High school credits, admission requirement, 12
- High school graduation, admission requirement, 12
- High school students, Illinois, attendance by, 40
- High school teaching, 161
- History and philosophy of science, 269
- History of art, 220
- History of music, 230
- History, 266, 295
  - teacher education minor, 322
- Home economics
  - education, vocational, 126
  - general, 122
- Honors
  - college, 78
  - credit learning agreements, 37
  - Dean's List, 78
  - graduation with honors, 78
  - Phi Kappa Phi, 78
  - University honors, 78
- Honors program, campus, 35
- Horticulture, 116
- Housing, 46
- Human development and family studies, 122
- Human Resources and Family Studies, School of 95, 118
  - Communications minor, 157
  - consumer economics, 119
  - dietetics, 120
  - foods and nutrition, 121
  - foods in business, 121
  - home economics education, vocational, 126
  - home economics, 122
  - human development and family studies, 122
  - human resources and family studies (home economics), 126
  - restaurant management, 124
  - textiles and apparel, 124
  - textiles and apparel, marketing of, 123
- Humanities major, 267
  - American civilization, 268
  - cinema studies, 268
  - history and philosophy of science, 269
  - medieval civilization, 269
  - Renaissance studies, 269
- Identification cards, 70
- Illini Union, 3, 47
  - Illini Union Board, 44
- Illinois Student Assistance Commission, 61
- Individual Plans of Study (IPS), 270
- Individual study programs, FAA, 210
- Industrial design, 220
- Industrial engineering, 204
- Information services, 43
- Installment plan, 50
- Instrumental music, 228
- Insurance fee, exemptions and waivers, 57
- Interdisciplinary minors in LAS, 297
  - African studies, 297
  - Afro-American studies, 297
  - Latin American studies, 298
  - Women's studies, 298
- International Baccalaureate Examinations, 33
- International opportunities in engineering, 182
- International student affairs, 45
- Intersession, 27
- Intramural sports, 3
- Italian, 290, 296
  - teacher education minor, 319
- James Scholars, 37
- Japan, Year Abroad Program in, 246
- Journalism major, 155
- Kappa Tau Alpha, 153
- Kinesiology, 129, 133
- Krannert Art Museum and Kinkead Pavilion, 3, 209
- Krannert Center for the Performing Arts, 3, 210
- Landscape architecture, 226
- Late registration fine, 49
- Latin American and Caribbean Studies, see Latin American studies
- Latin American studies, 270
  - interdisciplinary minor in, 298
- Latin
  - teacher education minor, 319
  - teaching of, 312
- Leisure studies, 130, 136
- Liberal Arts and Sciences, College of, 240
  - accounting science, joint degree program, 323
  - actuarial science, 280
  - admission requirements, 242
  - advanced hours requirement, 252
  - advising, 242
  - African studies, 247
  - African studies minor, 297
  - Afro-American studies, 248
  - Afro-American studies minor, 297
  - anthropology major, 254
  - anthropology minor, 293
  - art history major, 254
  - Asian studies major, 255
  - astronomy major, 256
  - awards, 245
  - biochemistry, specialized curriculum, 299
  - biology, teacher education minor, 321
  - biology, teaching of, 305
  - business administration, joint degree program, 323

- chemical engineering, specialized curriculum, 299
- chemistry major, 256
- chemistry minor, 293
- chemistry, specialized curriculum, 301
- chemistry, teacher education minor, 321
- chemistry, teaching of, 306
- cinema studies major, 268
- cinema studies minor, 293
- cinema studies, teacher education minor, 322
- classics major, 257
- classics minor, 294
- Cohn Scholar Program, 244
- combined degree programs, 245
- comparative literature major, 258
- computer science major, 258
- computer science minor, 294
- computer science, teacher education minor, 320
- computer science, teaching of, 307
- cooperative programs abroad, 247
- Cooperative Program in Chemistry, 256
- curricula, 249
- Dean's List, 243
- degree programs, 240
- dentistry, preprofessional requirements, 325
- departmental distinction, 244
- earth science, teacher education minor, 321
- earth science, teaching of, 308
- economics major, 259
- electives, 253
- English as a Second Language, teacher education minor, 318
- English composition requirement, 250
- English major, 260
- English minor, 294
- English, teacher education minor, 318
- English, teaching of, 309
- finance major, 261
- foreign language requirements, 250
- foreign languages, teacher education minors, 319
- foreign languages, teaching of, 310
- French major, 262
- French minor, 295
- French, teacher education minor, 319
- French, teaching of, 310
- general education, 250
- general requirements, 249
- general science, teacher education minor, 321
- geography major, 263
- geology and geophysics, specialized curriculum, 301
- geology major, 264
- geology minor, 295
- German minor, 295
- German, teacher education minor, 319
- German, teaching of, 311
- Germanic languages and literatures major, 265
- health information management, preprofessional requirements, 328
- health programs, preprofessional, 324
- history major, 266
- history minor, 295
- history, teacher education minor, 322
- honors at graduation, 244
- honors programs, 243
- hours required for graduation, 253
- humanities major, 267
- Individual Plans of Study (IPS), 270
- interdisciplinary minors, 252
- interdisciplinary teacher education minors, 322
- Italian major, 290
- Italian minor, 296
- Italian, teacher education minor, 319
- James Scholar Program, 243
- joint degree programs, 323
- LAS/commerce, 245
- LAS/engineering, 245
- Latin American studies major, 270
- Latin American studies minor, 298
- Latin, teacher education minor, 319
- Latin, teaching of, 312
- life sciences major, 271
- linguistics major, 279
- major, 251
- mathematics and computer science, 258
- mathematics, combined sciences and letters/education program for teachers, 315
- mathematics major, 280
- mathematics, teacher education minor, 320
- mathematics, teaching of, 314
- medical laboratory sciences, preprofessional requirements, 327
- medicine, preprofessional requirements, 325
- minors, 252, 293
- multidisciplinary study, 247
- music major, 281
- nursing preprofessional requirements, 326
- nutrition and medical dietetics, preprofessional requirements, 328
- occupational therapy, preprofessional requirements, 328
- pharmacy, preprofessional requirements, 327
- Phi Beta Kappa, 244
- philosophy major, 282
- physical science, teacher education minor, 321
- physical therapy, preprofessional requirements, 329
- physics major, 283



- physics, specialized curriculum, 302
- physics, teacher education minor, 322
- physics, teaching of, 315
- political science major, 284
- Portuguese major, 290
- Portuguese minor, 296
- Portuguese, teacher education minor, 319
- preprofessional health programs, 324
- professional school advising, 324
- professional school transfer credit, 324
- psychology major, 284
- psychology, teacher education minor, 322
- religious studies major, 286
- residence, 253
- rhetoric major, 261
- rhetoric, teacher education minor, 318
- Rogers Merit Scholar Program, 244
- Russian and East European studies major, 288
- Russian languages and literatures minor, 296
- Russian major, 287
- Russian, teacher education minor, 320
- Russian, teaching of, 312
- sciences and letters curriculum, 249
- sciences and letters majors, 254
- sciences and letters/education program for mathematics teachers, 315
- social studies, teacher education minor, 322
- social studies, teaching of, 316
- sociology major, 289
- sociology minor, 296
- Spanish major, 290
- Spanish minor, 297
- Spanish, teacher education minor, 320
- Spanish, teaching of, 313
- specialized curricula, 298
- speech and hearing science major, 291
- speech and hearing science, specialized curriculum, 303
- speech communication major, 291
- speech, teacher education minor, 319
- speech, teaching of, 317
- statistics major, 292
- statistics and computer science major, 292
- study abroad, 245
- teacher education curricula, 241, 304
- teacher education minors, 318
- veterinary medicine, preprofessional requirements, 327
- women's studies, 248
- women's studies minor, 298
- women's studies, teacher education minor, 322
- Librarian, University, 338
- Library and Information Science, Graduate School of, 330
- graduate study, 330
- library science, teacher education minor, 330
- Library science, teacher education minor, 330
- Library, University, 3
- Life sciences, 271
  - bioengineering, 272
  - biology, 273
  - biophysics, 274
  - cell and structural biology, 275
  - ecology, ethology, and evolution, 276
  - education specialty, 163
  - entomology, 276
  - microbiology, 277
  - physiology, 277
  - plant biology, 278
- Linguistics major, 279
- Listeners in class, 23
- Loans, 62, 66
- Manufacturing engineering option, 181
- Marketing of textiles and apparel, 123
- Mathematics and computer science, 258
- Mathematics
  - actuarial science, 280
  - advanced placement, 32
  - education specialty, 164
  - major, 280
  - mathematics and computer science, 258
  - teacher education minor, 320
  - teaching of, 314
- Mechanical engineering, 205
- Media studies, 156
- Medical laboratory sciences, LAS
  - preprofessional requirements, 327
- Medical services, 46
- Medicine, LAS preprofessional requirements, 325
- Medieval civilization option, 269
- Memorial Stadium, 3
- Metallurgical engineering, 206
- Microbiology option, 277
- Minority Student Affairs, 43
- Minors, teacher education, 88
- Misconduct, admission or readmission denied because of, 10
- Motor vehicles, 71
- Multidisciplinary study, LAS, 247
- Museums, 3
- Music composition/theory, 229
- Music education, 233
- Music, LAS major, 281
- Music, School of, 227
  - advanced placement, 33
  - curricula, 228
  - composition/theory, 229
  - education, 233
  - history of music, 230
  - instrumental, 228
  - voice, 231
- Natural sciences, advanced placement, 32
- Navy/Marine ROTC, 82

- News-editorial sequence, 155
- Nondegree applicants, 11, 22
  - application documents, 23
  - regulations, 22
- Nondegree students, summer, 26
- Nondiscrimination policy, housing, 47
- Nonresident portion of tuition, exemption and waiver, 54
- Nuclear engineering, 207
- Nursing, LAS preprofessional requirements, 326
- Nutrition and medical dietetics, LAS preprofessional requirements, 328
- Occupational therapy, LAS preprofessional requirements, 328
- Off-campus study, 41
- Officers of the University of Illinois at Urbana-Champaign, iv
- Organizations, registered student, 44
- Orientation, freshmen, 28
- Ornamental horticulture, 116
- Painting, 221
- Parkland College, concurrent enrollment, 41
- Parents, precollege programs, 29
- Payment requirement, 50
- Pell Grant, 61
- Pharmacy, LAS preprofessional requirements, 327
- Phi Beta Kappa, 244
- Phi Kappa Phi, 78
- Philosophy, 282
- Photography, 222
- Physical and mental health requirements, 15
- Physical education, teacher education minor, 136
- Physical science,
  - education specialty, 164
  - teacher education minor, 321
- Physical therapy, LAS preprofessional requirements, 329
- Physics
  - major, 283
  - specialized curriculum, 302
  - teacher education minor, 322
  - teaching of, 315
- Physiology option, 277
- Pilot, professional, 141
- Placement offices, college, 44
- Placement, teacher education, 92
- Placement testing, 28
- Plant biology option, 278
- Political science major, 284
- Polymer science/engineering option, 180
- Portuguese, 290, 296
- Portuguese, teacher education minor, 319
- Precollege programs, 28
  - academic advising, 28
  - freshmen, 28
  - parents, 29
  - placement, 28
  - transfer and readmitted students, 29
- Preparatory subject requirements, 11, 13
- Preprofessional health programs, 324
- Privately owned certified housing, 46
- Professional pilot curriculum, 141
- Professional pilot/aircraft maintenance technology curriculum, 142
- Proficiency examinations, 34
- Program management option, 138
- Psychology major, 284
- Psychology, teacher education minor, 322
- Quebec, Summer Program in, 246
- Readmission applicants, 10, 21
  - application documents, 21
  - financial aid, 60
  - precollege programs, 29
- Records policy, student, 69
- Reduction of program, refund of fees, 51
- Refunds, 50
- Registered student organizations, 44
- Registration
  - cancellation, refund of fees, 50
  - late registration fee, 49
- Religious courses, 76
- Religious studies major, 286
- Renaissance studies option, 269
- Reserve Officers' Training Corps (ROTC), 4, 80
  - Air Force, 84
  - Army, 80
  - engineering combined program, 182
  - Navy/Marine, 82
- Residence
  - classification, 49
  - graduation requirements, 75
- Residence halls, 46
- Restaurant management, 124
- Rhetoric
  - major, 261
  - teacher education minor, 318
- Rogers Merit Scholar Program, 244
- ROTC, 80
- Russian and East European studies major, 288
- Russian major, 287
- Russian, teacher education minor, 320
- Russian, teaching of, 312
- Scholarships, 60-66
  - Agriculture, 97
  - Air Force ROTC, 86
  - Army ROTC, 80
  - Navy/Marine ROTC, 83
- Sciences and letters (LAS) curriculum, 249
- Sciences and letters majors, 254



- Sciences and letters/education program for mathematics teachers, 315
- Sculpture, 223
- Second bachelor's degree
  - applicants for, 11, 22
  - graduation requirements, 75
- Service fee, exemptions and waivers, 54
- Social science of sport major, 134
- Social studies
  - advanced placement, 33
  - education specialty, 165
  - teacher education minor, 322
  - teaching of, 316
- Social work, 331
  - degrees awarded, 331
  - sample of undergraduate program, 332
- Sociology major, 289, 296
- Soil science, 117
- Sororities, 46
- Spain, Year Abroad Program in, 246
- Spanish, 290, 297
  - teacher education minor, 320
  - teaching of, 313
- Special admissions, 11
- Special opportunities, 30
  - advanced placement program, 30
  - College-Level Examination Program (CLEP), 34
  - concurrent enrollment, 41
  - delayed admission, 41
  - disabled, physically, services for, 40
  - early admission program, 41
  - Educational Opportunities Program (EOP), 39
  - honors program, 35
  - high school students, Illinois, 40
  - International Baccalaureate Examinations, 33
  - James Scholars, 37
  - proficiency examinations, 34
  - study away from campus, 41
  - Transition program, 38
- Specialized curricula, LAS, 298
- Speech and hearing science major, 291
  - specialized curriculum, 303
- Speech communication major, 291
- Speech
  - teacher education minor, 319
  - teaching of, 317
- Statistics major, 292
- Statistics and computer major, 292
- Student activities, 4
- Student body, 2
- Student costs, 48
  - application fee, 52
  - exemptions and waivers, 51
  - flight training fees, 49
  - health insurance, 57
  - installment plan, 50
  - late registration, 49
  - payment requirement, 50
  - refunds, 50
  - residence classification, 49
  - student expenses, 48
  - tuition and fees, 48, 59
  - waivers and exemptions, 51
- Student family housing, 47
- Student health insurance, waiver, 57
- Student records policy, 69
- Student services, 43
  - Career Services Center, 44
  - college placement offices, 44
  - Counseling Center, 43, 44, 45
  - counseling services, 43
  - Dean of Students, 43
  - Educational Opportunities Program (EOP), 45
  - extracurricular activities, 44
  - financial aid, student, 44
  - health center, 46
  - health professions information, 44
  - housing, 46
  - Illini Union, 47
  - Illini Union Board, 44
  - information services, 43
  - international student affairs, 45
  - medical services, 46
  - minority student affairs, 43
  - registered students organizations, 44
  - specialized services, 45
  - student financial aid, 44
  - supportive instruction, 45
  - veterans affairs, 45
  - women's programs, 45
  - Writing Laboratory, 45
- Student teaching, 89
- Student-to-student matching (STSM) grant, 62
- Students for Equal Access to Learning Grant (SEAL), 62
- Study abroad
  - Engineering, 182
  - FAA, 211
  - LAS, 245
- Study away from campus, 41
- Study opportunities, undergraduate, 9
- Subject requirement patterns, 12, 13
- Summer Bridge Component, 38
- Summer session, 25
  - application documents, 27
  - degree candidates, 26
  - nondegree students, 26
- Supercomputing centers, 3
- Supplemental Educational Opportunity Grant (SEOG), 62
- Supportive instruction, 45
- Tau Beta Pi, 184
- Teacher certification, 90

- general requirements, 90
- placement, 92
- tests, 91
- time limit, 91
- Teacher education minors
  - Applied Life Studies, 133, 136
  - Commerce, 150
  - Communications (journalism), 157
  - Education, 166
  - FAA, 239
  - LAS, 318
  - Library and Information Science, 330
- Teacher education, 87
  - admission requirements, 88
  - certification, 90
  - Council on, 87
  - curricula, 87
  - minors, 88
  - placement, 92
  - requirements for continuation, 89
  - student teaching, 89
- Teacher education curricula, 241, 304
- Technical education specialties, 171
- Testing, placement, 28
- Textiles and apparel option, 124
- Textiles and apparel, marketing of, option, 123
- Theatre design, technology, and management, 236
- Theatre, 234
  - acting, professional studio in, 235
  - applied theatre, 234
  - curriculum, 234
  - design, technology, and management, 236
- Therapeutic recreation option, 138
- Theses, graduation requirement, 77
- Transcripts, 69
- Transfer applicants, 10, 17
  - admission requirements, 18
  - application calendar, 18
  - application documents, 21
  - financial aid, 60
  - from Chicago campus, 18
  - grade-point averages, 19
  - nontraditional credit accepted, 20
  - precollege programs, 29
  - probation, 18
  - traditional credit accepted, 19
  - transfer credit accepted, 19
- Transition program, 38
  - Summer Bridge Component, 38
- Trustees, Board of, iv
- Tuberculosis control, 15
- Tuition and fees, 48, 59
  - exemptions and waivers, 51
  - installment plan, 50
- Undergraduate enrollment considerations, 9
- Undergraduate study opportunities, 9
- University honors, 78
- Urban and regional planning, 238
  - urban studies, teacher education minor, 239
- Vehicle registration, 71
- Veterans
  - affairs, 45
  - financial aid, 64
- Veterinary medicine preprofessional program, 118, 327
- Veterinary medicine, 333
  - admission, 334
  - costs, 336
  - curriculum, 336
  - graduation requirements, 336
  - honors at graduation, 336
  - preprofessional course requirements, 333
  - preprofessional requirements, LAS, 327
- Visitors Center, Campus, 4
- Visitors in class, 23
- Voice major, 231
- Vocational home economics education, 126
- Waivers of tuition and fees, 51
- Willard Airport, 2, 3
- Withdrawal refunds, 51
- Women's programs, 45
- Women's Studies, Office of, 248
- Women's studies, 248, 298
  - teacher education minor, 322
- Wood products industries option, forestry, 116
- Work-study, 62
- Writing Laboratory, 45















Where to Write or Telephone for Information about:

**ADMISSIONS FOR UNDERGRADUATE, GRADUATE, AND VETERINARY MEDICINE STUDENTS; APPLICATION FORMS; TIMETABLES:** Admissions and Records, University of Illinois at Urbana-Champaign, 10 Henry Administration Building, 506 South Wright Street, Urbana, IL 61801, (217) 333-0302.

**CAMPUS INFORMATION:** Information Desk, Illini Union, University of Illinois at Urbana-Champaign, 1401 West Green Street, Urbana, IL 61801, (217) 333-4666.

**CAMPUS LIFE AND STUDENT WELFARE:** Dean of Students, University of Illinois at Urbana-Champaign, 300 Turner Student Services Building, 610 East John Street, Champaign, IL 61820, (217) 333-0050.

**EMPLOYMENT ASSISTANCE:** Student Financial Aid, University of Illinois at Urbana-Champaign, Fourth Floor, Turner Student Services Building, 610 East John Street, Champaign, IL 61820, (217) 333-0600.

**FINANCIAL ASSISTANCE:** Student Financial Aid, University of Illinois at Urbana-Champaign, Fourth Floor, Turner Student Services Building, 610 East John Street, Champaign, IL 61820, (217) 333-0100.

**HOUSING:** Housing Information, University of Illinois at Urbana-Champaign, 2 Turner Student Services Building, 610 East John Street, Champaign, IL 61820, (217) 333-1420.

**MOTOR VEHICLE AND BICYCLE REGISTRATION:** Campus Parking, University of Illinois at Urbana-Champaign, 505 East Green Street, Champaign, IL 61820, (217) 333-3530.

**OTHER INFORMATION:** University Directory Assistance, (from on-campus) 333-0920, (from off-campus), (217) 333-1000. Public Affairs, Swanlund Administration Building, 601 East John Street, Champaign, IL 61820, (217) 333-5010.

**PERMANENTLY PHYSICALLY DISABLED STUDENTS:** Rehabilitation-Education Services, University of Illinois at Urbana-Champaign, 1207 South Oak Street, Champaign, IL 61820, (217) 333-4602.

**SCHOLARSHIP, AWARD, AND FELLOWSHIP INFORMATION; HONORS PROGRAMS; PUBLICATIONS OF COLLEGES, SCHOOLS, AND OTHER URBANA-CHAMPAIGN CAMPUS UNITS:** Appropriate college, school, or unit; an address is given in each college's or unit's section.

**VETERANS' EDUCATIONAL BENEFITS:** Veterans Educational Benefits, University of Illinois at Urbana-Champaign, Fourth Floor, Turner Student Services Building, 610 East John Street, Champaign, IL 61820, (217) 333-0100.

**CHICAGO CAMPUS:** Admissions and Records, University of Illinois at Chicago, 412 South Peoria Street, Chicago, IL 60607, (312) 996-4350. Professional Admissions, 412 South Peoria Street, Chicago, IL 60607, (312) 996-7690.

Reference copies of this publication are available at Illinois public libraries, high schools, and community colleges. Copies of the *Undergraduate Programs*, *Graduate Programs*, and *Courses* catalogs may be purchased at or ordered by mail from the Illini Union Bookstore, 715 South Wright Street, Champaign, IL 61820.

UNIVERSITY OF ILLINOIS-URBANA



3 0112 003226906